DOCUMENT RESUME

ED 184 486 HE 012 538

AUTHOR Krauth, Barbara, Ed.
TITLE Postsecondary Education Program Review: Report of a WICHE-NCHEMS Workshop and Study.
INSTITUTION National Center for Higher Education Management Systems, Boulder, Colo.; Western Interstate Commission for Higher Education, Boulder, Colo.
PUB DATE Feb 80
NOTE 166p.
AVAILABLE FROM Western Interstate Commission for Higher Education, P.O. Drawer P, Boulder, CO 80302

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *College Planning; *Curriculum Evaluation; *Educational Assessment; Geographic Regions; Higher Education; Institutional Research; Needs Assessment; Postsecondary Education; *Program Evaluation; Resource Allocation; *Self Evaluation (Groups); State Departments of Education; *Statewide Planning
IDENTIFIERS Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; New Mexico; Oregon; Utah; Washington; Wyoming

ABSTRACT

Proceedings of a workshop on program review in postsecondary education and a report of a program review study are presented. The workshop was designed to acquaint participants with the changing academic planning environment, to provide a better understanding of the purposes of program review, and to exchange ideas for improving procedures. Its focus was on procedures in the 13 western states; the emphasis was on the relationship of state agency practices to institutional program review. The presentations cover the range from theoretical to actual practices, from the context in which program review will continue to take place to the use of quantitative measures to evaluate quality. The report is the result of a survey of institutions and state higher education agencies in the 13 western states. It examines the issues involved in program review, describes the approaches taken to it, and clarifies the differences in program review activities at the state and institutional levels. State profiles are given for Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Tables provide: institutional responses by level; involvement in development of current procedures; purpose for review; criteria for review of new program proposals; date present policies were initiated; criteria for selection of programs for review; criteria for review of existing programs; and relation of program review to other activities. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED184486

Postsecondary Education Program Review

Report of a WICHE-NCHEMS Workshop And Study

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

WICHE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

HE 012 538

NCHEMS

WICHE
Improving Education In The West

Published February 1980
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302
Publication Number 2A58
0121300000045000:8C:280:GD:ROB:2A58
Printed in the United States of America

Contents

Foreword..... v

I. Workshop Proceedings..... 1

Workshop Overview - John Folger..... 3

The Changing Context of Program Review..... 11
- Demographic Changes - Larry Suter..... 13
- Fiscal Constraints - Harold Geiogue..... 15
- Projection of High School Graduates - William McConnell..... 17
- Institutional Responses - T. K. Olson..... 21

The Challenge to Program Reviewers - Patrick Callan..... 25

The Current Status of Program Review Activities..... 33
- Study of Program Review - Robert Barak..... 35
- Program Review Study: An Introduction - Lilla Engdahl..... 39
- Hawaii - Durward Long..... 41
- California Community Colleges - John D. Meyer..... 47
- Arizona - William Phillips..... 49

Program Review in Postsecondary Education: A Return to Judgment - Edward Kelly..... 55

Relating Role and Mission to Program Review - J. Kent Caruthers..... 81

Levels of Program Review..... 91
- State - William Chance..... 93
- Institution - Hugh Petrie..... 97
- System - Anthony J. Moye..... 101

Improving Program Review Through an Effective Information System..... 107
- State-Level Information Base Project - Roger Bassett... 109
- Kentucky - Brenda Helton..... 111
- California - Norman Charles..... 115
- New Mexico - Robert Rhodes..... 117

II. Study of Academic Program Review - Lilla Engdahl and Robert Barak..... 121

III. State Profiles..... 149

Alaska..... 151
Arizona..... 153
California..... 155
Colorado..... 158
Hawaii..... 160
Idaho..... 162
Montana..... 164
Nevada..... 165
New Mexico..... 166
Oregon..... 168
Utah..... 172
Washington..... 174
Wyoming..... 176

Tables

Table 1 Institutional Responses by Level..... 139
Table 2 Involvement in Development of Current Procedures..... 141
Table 3 Purpose for Review..... 142
Table 4 Criteria for Review of New Program Proposals..... 143
Table 5 Date Present Policies Were Initiated..... 144
Table 6 Criteria for Selection of Programs for Review..... 145
Table 7 Criteria for Review of Existing Programs..... 146
Table 8 Relation of Program Review to Other Activities..... 147

Figures

Figure 1 Pattern of Projected Public High School Graduates..... 18
Figure 2 Pattern of Annual Resident Live Births..... 19
Figure 3 Decision Categories for Program Review..... 64
Figure 4 Dimensions of Agreement Between Institutional and Program Review Representatives..... 66
Figure 5 Hypothetical Skewed Distribution of Program Quality..... 73
Figure 6 Hypothetical Standard Normal Distribution of Program Quality..... 74

Foreword

Program review is an important activity in the management and planning of higher education today. It is crucial, in the face of changes in student demand and increasing fiscal constraints, for institutions and state agencies to assess both existing and proposed programs with an eye toward the most effective use of resources. Program review is a tool which, used wisely, can effectively respond to the need to maintain quality even in the face of the current pressures on higher education.

This workshop was designed to acquaint participants with the changing academic planning environment, to provide a better understanding of the purposes of program review, and to exchange ideas for improving procedures. Its focus was on procedures in the thirteen western states; the emphasis was on the relationship of state agency practices to institutional program review. A variety of perspectives was presented among the speakers at the conference. Together, their presentations cover the range from the theoretical (Edward Kelly) to actual practices (all the presentations in section three), from the context in which program review will continue to take place (section 1) to the use of quantitative measures to evaluate quality (William Chance). Workshop proceedings constitute Part I of this publication. Readers who are interested in a summary of the proceedings should refer to the first section in the proceedings, "Workshop Overview" by John Folger.

Part II of the publication is a report of a program review study conducted by Lilla Engdahl of the WICHE staff and Robert Barak, Director of Research and Information, Iowa State Board of Regents. This report is the result of a survey of institutions and state higher education agencies in the thirteen western states. It examines the issues involved in program review, describes the approaches taken to it, and clarifies the differences in program review activities at the state and institutional levels. A comprehensive discussion of actual practices used in the review of higher education programs in the West, this report should be of interest to decision makers at both state agencies and higher education institutions.

We would like to thank the California Postsecondary Education Commission for hosting the workshop and Barbara Krauth for coordinating workshop arrangements and editing this publication. The work of Cheryl Pedersen and Dorothy Read of the WICHE staff in typing the manuscript and preparing meeting materials is also appreciated.

Richard Jonsen
Western Interstate Commission
for Higher Education

Roger Bassett
National Center for Higher
Education Management Systems

I. Workshop Proceedings

Workshop Overview

A summary of the workshop.

John Folger
Director of Policy Project
Education Commission of the States

WORKSHOP OVERVIEW

John Folger

The conference made a creative contribution to our understanding of the purposes of program review, and to the future prospects for this type of activity. It began with a review of the environmental conditions within which program review will be made, and which will shape the expectations for this activity. It was followed by discussion of the purposes of program review, and this led into discussion of the future of program review activities. This summary organizes the conference discussion under these three major headings.

The Environment

The first session explored the environment for program review. There was general agreement that: enrollments will decline nationally and in most states by about 10-15 percent; legislators will be unwilling to provide any real dollar increases for higher education in most states and in some states, appropriations may not keep up with inflation; higher education had better get busy and do its own program review before somebody else does it for them.

The opening session focused on trends in enrollment, but the important problem is going to be fluctuations around those trends. The demographic trend indicated an average loss of 2 percent a year in enrollment between 1980 and 1985, and another 1 percent a year between 1985 and 1990; but, those average trends do not indicate that there will be wide variations from year to year about these trends, and the variations may create more problems than the trends themselves.

An equally likely trend is that enrollments will decline only an average of 1 percent a year between 1980 and 1985 and not at all during the next five-year period. That prediction is based on the following points: The population between the ages of 25 and 40, with some college experience, will increase about 33 percent by 1990; this represents a sizeable increase in the potential market. While this group makes up about one-fourth of the enrollment now, it might comprise one-third by 1990. The second point is that colleges have a great deal at stake in increasing participation rates and it is likely that they will do so, either by attracting new clientele or by serving existing clientele in ways that enhance their budgetary situation.

Between 1974 and 1975 enrollment jumped 10 percent as a result of more part-time attendance during a recession. Between 1975 and 1976 it leveled off. Annual fluctuations of 10 percent up or down around the trend are quite possible; this can lead to crisis management of finances and possibly of programs.

Long-term real growth in income averaged about 3-4 percent a year in the 1950's and 1960's. It has averaged about 1-2 percent a year in the 1970's,

and can easily fluctuate around that trend by 3-5 percent a year. This causes even larger swings in tax collections and in the discretionary state revenues that higher education can compete for. A reasonable prediction is that we are likely to have at least two recessions in the next decade, and that both fluctuating revenues and fluctuating enrollments are likely to disrupt orderly planning and program review.

The projections vary substantially from state to state. About 5 or 6 states will have increases in the college age group between 1975 and 1990, while a few states will have decreases of 25 percent or more. The average decrease of 15 percent contains wide state to state variations.

Within-state variations in enrollment will be even larger than variations between states. It will not be uncommon for states to have some institutions that lose 40-50 percent of their enrollment, while other institutions in the same state grow. Between 1970 and 1975, 10 percent of the public institutions lost over 10 percent of their enrollment, averaging about a 22 percent loss, but the average public enrollment increased about 30 percent during those same five years.

To summarize the session: planning, program review, and budgeting will have to be done under conditions of great variability. The pressure to avoid complex evaluation procedures in favor of simple crisis management activities such as across the board adjustments will be great. The question for higher education in some states will be: with legislatively enacted revenue and expenditure controls on the budget, will anybody pay attention to program review as a management or fiscal control process?

The Challenge

Patrick Callan emphasized the importance of states and institutions having a plan, or plans, for dealing with the environmental conditions of the 80's, rather than reacting from crisis to crisis. A conservative plan will be more useful than trying to operate under conditions of great uncertainty.

Purposes of Program Review

This conference made a considerable contribution to clarifying the purposes that institutions, state agencies, and state legislatures and officials may have for program review. Let me state some of the purposes that emerged.

For institutions, the traditional purpose has been:

- A self-assessment for improvement initiated within the institution to provide some judgment about the worth and needs of programs. Accreditation program review has also been carried out largely in the spirit of self-improvement. Only in the marginal institutions does accreditation have a major threat of sanctions.

A new purpose is:

- To reallocate resources within the institution, to enable the institution to do more with the available resources. The collegial nature of institutional governance makes this new purpose difficult to achieve. We have a tradition of widespread faculty participation in program review activities, but if the purpose is resource reallocation, faculty participation is more likely to thwart or impede the process than to make it acceptable. Traditional notions that widespread participation is important to implementation need to be reassessed <u>if the primary purpose is resource reallocation</u>.

Callan stressed the importance of removing disincentives and adding incentives to institutional administrators to undertake the difficult task of program review and reallocation. Dick Jonsen added the important idea that program review as a resource reallocation process might make more headway if it did not deal with traditional disciplinary definitions of "program." The discussion suggested that external groups, such as legislators or state budget officers, are not concerned about the disciplinary mix within an institution, but instead are concerned with effective management and service to students. However, external groups are concerned with the professional programs that are offered, so that aspect of program review is likely to command considerable external interest.

This point needs further examination. The faculty are, first and foremost, disciplinary specialists, and if program review could focus more on the adjustment of curricula to a changing student clientele or on an evaluation of the impact of education on students, it might make more headway within the institution than an examination of programs simply as disciplines and professional specialties.

It was also pointed out that internal institutional program review has to be linked to the budget process and to personnel decisions if it is to be effective as <u>either</u> a reallocation process or a renewal and improvement process.

The conference discussions also examined the purposes of program review for the state agency.

The historical purpose was to provide for orderly growth by controlling institutional expansion through approval of new programs. That purpose can be extended to the present, where approval of new programs can be used to control wasteful or excessive competition among institutions for a shrinking or static pool of students.

A second state purpose is similar to the institutional purpose: to provide for quality control, to prevent substandard programs, and to encourage good ones. Many institutions resist the state role in qualitative judgment, however, and in some states their purpose in program review is expressed as "seeing that each institution has an effective process of internal review." Accreditation is the traditional vehicle for quality control

through self-regulation. Unfortunately, the credibility of accreditation at the state level is low; most institutions trying to persuade the state that they have an "effective process of internal review" are going to have to add to the usual accreditation review process.

A third state purpose is to assure that, statewide, the mix of programs represents the most effective use of available resources. Are the programs properly related to student demand and society's demand for graduates, and are they a reasonably efficient size? Has the institution's quest for students led it to fragment its efforts in too many areas and blur its role and mission? The importance of clear role and mission statements as a basis for state program review was stressed. With clear and concise role and mission statements, program review is simplified. The California State Colleges annual program plan, the Washington program registry, and other similar means of maintaining a specific program statement for each institution serve the purpose of state program review. Role and mission statements should be the basis for determining the extent to which the programs offered in the state are consonant with needs of the citizens/students and employers.

A fourth state purpose for program review is to assure state officials that resources are being used efficiently and that institutions are dealing with problems of overlap and duplication in programs. The basic state interest is in efficient management, of which program review is only a part.

Some of the most difficult issues in state program review arise out of the merger of these different purposes. In practice, a state's program review efforts may represent a blend of these various purposes, with an emphasis on a credible management of program resources becoming the most important in the next decade.

The issue of the state agency as institutional advocate vs. the state agency as critic and evaluator was discussed without being resolved. Coordinating boards have been able to establish themselves as more credible than governing boards in the evaluator role, primarily because they do not play the advocate role as aggressively as the governing boards.

The Future Directions for Program Review

Pat Callan emphasized the need for the state, through the state agency, to establish some stable planning assumptions so that a program review process has some chance of success. Sudden political demands for organizing all programs in priority order and eliminating those that are lowest in priority will have a "chilling effect" on an orderly process of planning, program review, and resource reallocation.

The state agency role in program review during the next decade is more likely to emphasize regulation and resource reallocation than facilitating institutional "self-renewal and improvement." But if the state agency can provide incentives by dollars for limited strengthening of selected areas such as the Florida Center of Excellence concept, it may encourage the self-renewal process within the institutions.

Finally, the state interest of legislators and officials is likely to center on the budgetary implications, rather than directly on program review. It was pointed out that generally legislators and state officials are not interested in program issues, except where these involve high visibility programs, such as medical schools, termination of an engineering school, or institutional closure. Where legislatures have become directly involved in program review, as in Colorado and Nebraska, results have not been politically rewarding and aren't likely to be in the future. State agencies will take the heat in most states for program reviews that are politically unpopular.

The discussions brought out the importance, for the state agency as well as the institution, of the linkage of planning, program review, and budgeting.

Finally, the conference participants identified some program review issues that need further resolution:

1. How best to link program and budget?
   - Does it imply a program budget approach?
   - What budget incentives to self-renewal and program improvement can be provided?
   - Will adoption of "priority budgeting" or "zero based budgeting" limit the interest in program review by substituting a quick budgetary evaluation of programs for a more carefully designed process?
2. What are the best ways of relating a program review process to planning and to the role and mission delineation?
3. What are the best relationships between state agency program review and institutional and state purposes--both formative evaluation and summative evaluation objectives?
   - Can states develop and enforce criteria for institutional program review so that institutional program review serves state purposes adequately?
4. How can incentives be provided to institutions to engage in effective renewal and improvement activities? Which current program review procedures foster renewal and improvement?
5. What is the best way for states to demonstrate to the public that they and the institutions in the state have an effective management of program resources?

The conference served a useful purpose in raising these issues and suggesting approaches to them. The answers to these questions will necessarily vary from state to state, because of the difference in traditions,

existing structures, and the nature of the enrollment and fiscal problems in the state. But all states can benefit from an orderly planning process, clarification of purposes for program review, and definition of the roles of institutions, state higher education agencies, legislators, and governors in the process.

The Changing Context of Program Review

A discussion of the demographic and fiscal environment in which program review is currently taking place.

Larry E. Suter, Chief
Education and Social Stratification Branch
Population Division
U.S. Bureau of the Census

Harold Geiogue
Principal Analyst
Joint Legislative Budget Committee
California

William McConnell
Program Director
WICHE Student Exchange Program

T. K. Olson
Executive Director
Oregon Educational Coordinating Committee

DEMOGRAPHIC CHANGES

Larry Suter

Demographic changes in the United States have always been closely tied to postsecondary enrollments, and I believe this relationship will be even stronger in the future. I have been asked to address the question of what is likely to happen to postsecondary enrollments in the next ten years, and will try to state my opinion as succinctly as possible: I think that enrollment in colleges will decline by about 15 percent by 1990. It will decline by approximately 10 percent by 1985 and then continue downward.

Past enrollment increases were due to three main social and demographic forces:

- Population growth between 1947-1961. The baby boom began in October of 1947; following that, the number of births fluctuated until 1961. The high birth years were 1959-1961, after which the absolute number of children born declined and has remained low.

- Increase in high school graduate rates. In the 1950's, only about 60 percent of the eligible age group graduated from high school. By 1970, that rate had increased to 75 percent; by 1975, it was 85 percent, where it levelled off. In the West the graduation rate is at about 90 percent, whereas the rate in some states in the South is only 68-75 percent.

- Higher proportions of men and women high school graduates attending college. During the Viet Nam war some men--about 10 percent of the age group--went to college because of draft deferments. Women, also, began to attend college at increasing rates. In the last few years, women aged 18-19 have been attending college at nearly the same rate as men.

- More older persons attending college. Although two-thirds of undergraduates are still 18-21 years old, the proportion of older persons attending has increased. A number of predictions suggest that the increase in enrollment rates among older women, in particular, is likely to offset other factors to counteract declines. I do not believe that it will.

These same factors will dominate future enrollment patterns, but with the following differences:

- There will be no further increase in high school graduation rates for most states. The greatest potential change is in the South; the rate is unlikely to go above the present 90 percent in the West.

- There will be a levelling of the ratio of high school to college rates. There is no good explanation for this other than a need for immediate employment and the changes in the perceived benefits of college.

- The population as a whole will decline (population in thousands):

Ages	1980	1985	% of 1980	1990	% of 1980
15-24	41,527	38,517	92.8	34,730	83.6
18-21	17,117	15,442	90.2	14,507	84.8
22-24	12,346	12,411	100.1	10,642	86.2
25-29	18,930	20,581	108.7	20,169	106.5
30-34	17,242	19,278	111.8	20,917	121.3

- Graduate enrollments should of course decline, as well, especially to the extent that graduate schools have served to prepare students for academic careers. Enrollments should decline significantly in the 1980's; however, birth rates could pick up in the 1980's for a brief period, creating more potential college students in the years 2000-2010.

FISCAL CONSTRAINTS

Harold Geiogue

Proposition 13 is a year old in California, but it has become a national phenomenon in the course of that year. We have had some lessons drawn for us which might be useful to those of you in other states where higher education is likely to be affected by constraints on government expenditures.

Proposition 13 is, of course, not an expenditure limitation, but merely a limitation on one source of revenue, the property tax. Proposition 13 doesn't say anything about whether the government can grow 20 or 30 or 40 percent; it just says that they can't fund it more than X from the property tax. Because of this, its main impact was on the community colleges. Community colleges in California have traditionally been 60 or 70 percent funded from the local property tax, with the remainder coming from the state and a very small percentage from the federal government. So it was clear that the community colleges would have to adjust their planning to take account of fiscal constraints.

More interesting, however, is the fact that Proposition 13 has had a direct impact on the University of California and the California State University and Colleges, which have had no property tax support. In fact, the most bewildered people after Proposition 13 were these segments of postsecondary education. What developed, obviously, was a political environment involving the fiscal condition in general, and not just the property tax or any other form of tax. The general voter climate of opinion was (and is) against government spending in all forms.

The impact of that attitude was felt at all levels last year, particularly in postsecondary education. Since we have a July 1 deadline for the budget, we went through all the budgets in about 20 days and reduced them in a rather severe fashion. Major reductions were made in operating expenses, and all the new programs on line were taken out. Salary increase items, of course, also fell out of the budget.

Following that, the mood continued into November, when a significantly new group of legislators was elected--in the wake of Proposition 13 and a new political environment. Several members who had expected to return to the legislature this year did not because Mr. Jarvis sent out a computer letter (which arrived the day before the election) saying, in essence, "Thanks for voting for Proposition 13. The person I think most carries my message is Joe or Jane Blow." Several incumbents were "bushwhacked" in that manner. This phenomenon may spread to your states as well; it is certainly a reality in California.

The general impulse to jump on the bandwagon has also caused two new initiatives, one an expenditure control initiative, the other another Jarvis proposal--an income tax limitation. The governor, too, has certainly heard the message and has been going around the country talking about expenditure

control and deficit spending. The irony here is that California itself is in a deficit spending pattern. While we are proselytizing to the nation, we are currently sinners ourselves. Another reality in our political environment is reapportionment. Generally over the course of the legislative sessions, the concern is with budget and taxes, but every ten years, it's reapportionment. Given the mood of the public, I believe that the next major election will lean heavily towards fiscal issues.

One final reality: In terms of postsecondary education's share within this constrained fiscal environment, we need to keep in mind that spending at the state level has two major functions. One is to provide local assistance--for cities, counties, special districts, even school districts. The second is what we call the major state operations. We have a total budget of 15-16 billion dollars, but only a third of that is the controllable state operations; the rest goes out under local assistance formulas. When we look for economies in the budget, postsecondary education has a major share of the state operations part of our budget. Postsecondary education does stand out, therefore, as an available target, and it will be looked to more and more as a place to find economies. We feel that major trade-offs will be questions of access and questions of quality. Institutions will either increase productivity and workload or in some way take advantage of the decline in enrollments as ways to control cost.

In the 14 years of my experience in Sacramento, there has been a great deal of rhetoric about economy and fiscal constraints. Nevertheless I believe that the lesson of Proposition 13 is that the reality is now upon us; economy and fiscal constraints are no longer only the rhetoric of politicians.

PROJECTIONS OF HIGH SCHOOL GRADUATES

William McConnell

I have recently completed a report which projects the annual number of graduates of the public high schools in each of the thirteen western states through 1995. The results of that study indicate that the widely publicized declines in the college age population which are projected to occur in the near future are likely to vary in degree from state to state.

Declines in western states are not expected to be as severe as in the nation as a whole, although they will follow the same general pattern:

- a peak between 1975 and 1982
- a significant decrease from that peak, levelling off to a low point between 1984-86
- a brief upturn in 1986-88
- a decrease to another low point in 1990-91
- an increase to 1995, the last year of the projection.

The implications of this situation for higher education planning and the review of existing programs are quite clear. Projections of high school graduates in each state are part of an increasingly important effort to plan for shifting enrollment patterns. Obviously, it is particularly important during a period of such varied roller-coaster falls and rises in the number of high school graduates to carefully monitor developments state by state. In Wyoming, for example, where the projection shows a decrease only between 1982 and 1984 followed by a steady increase to 1995, but the picture in California is quite different.

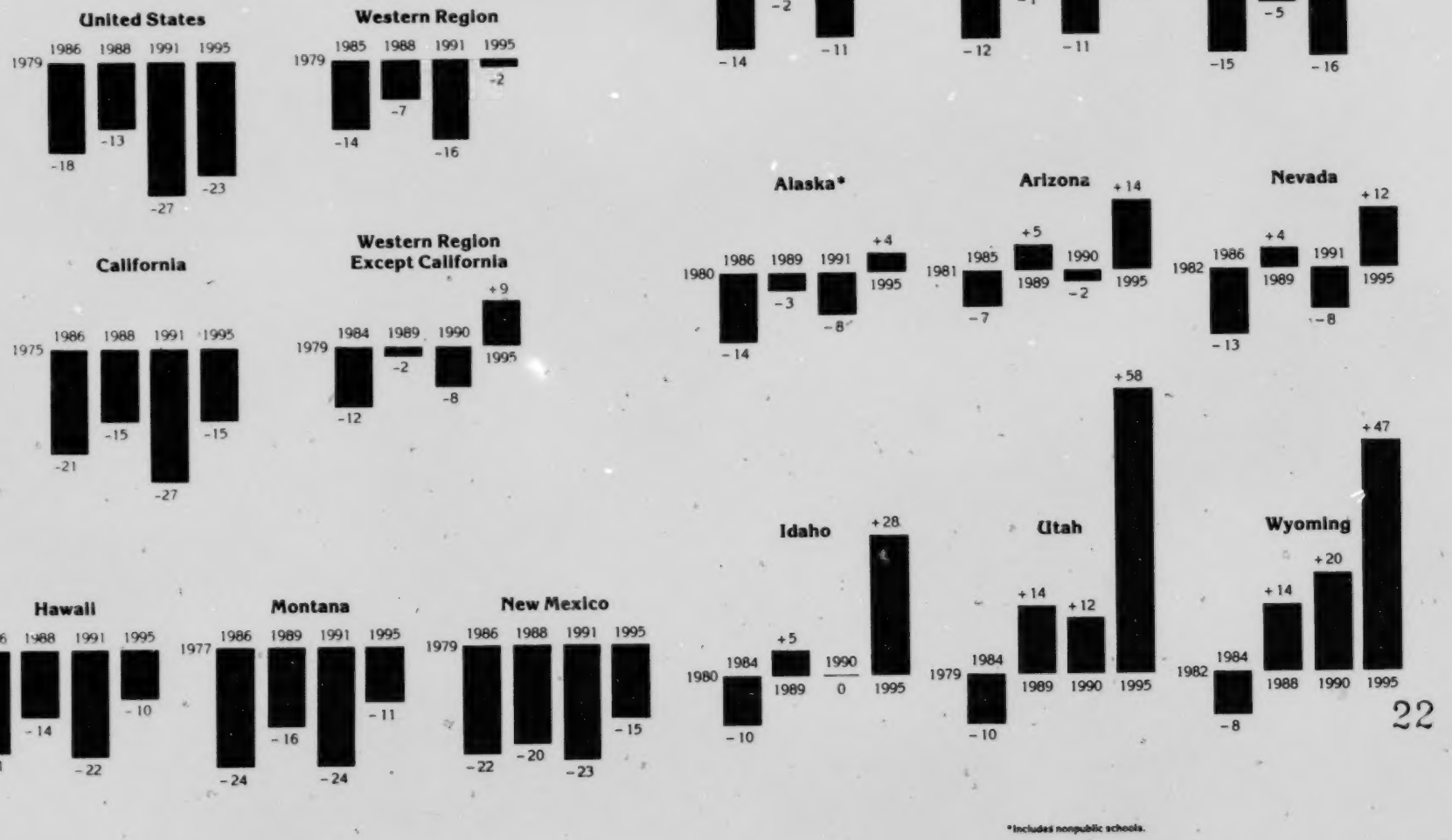
Before I show you the individual state projections of high school graduates over the next fifteen years, I'd like to say a little about the method used in deriving them. The projection technique used was the grade-progression method. Using historical data (on births, grade by grade enrollments, and high school graduates), the ratio of enrollment in first grade to number of resident live births six years earlier was calculated for each first grade group. The ratio of second-grade enrollment one year to first-grade enrollment the previous year was calculated for each age group. Similarly, a column of ratios was calculated for each move from grade to grade through twelfth grade.

The results are as follows:

Figure 1

Pattern of Projected Public High School Graduates 1979-1995, Western States

Percentage Changes from Peak Reached about 1979

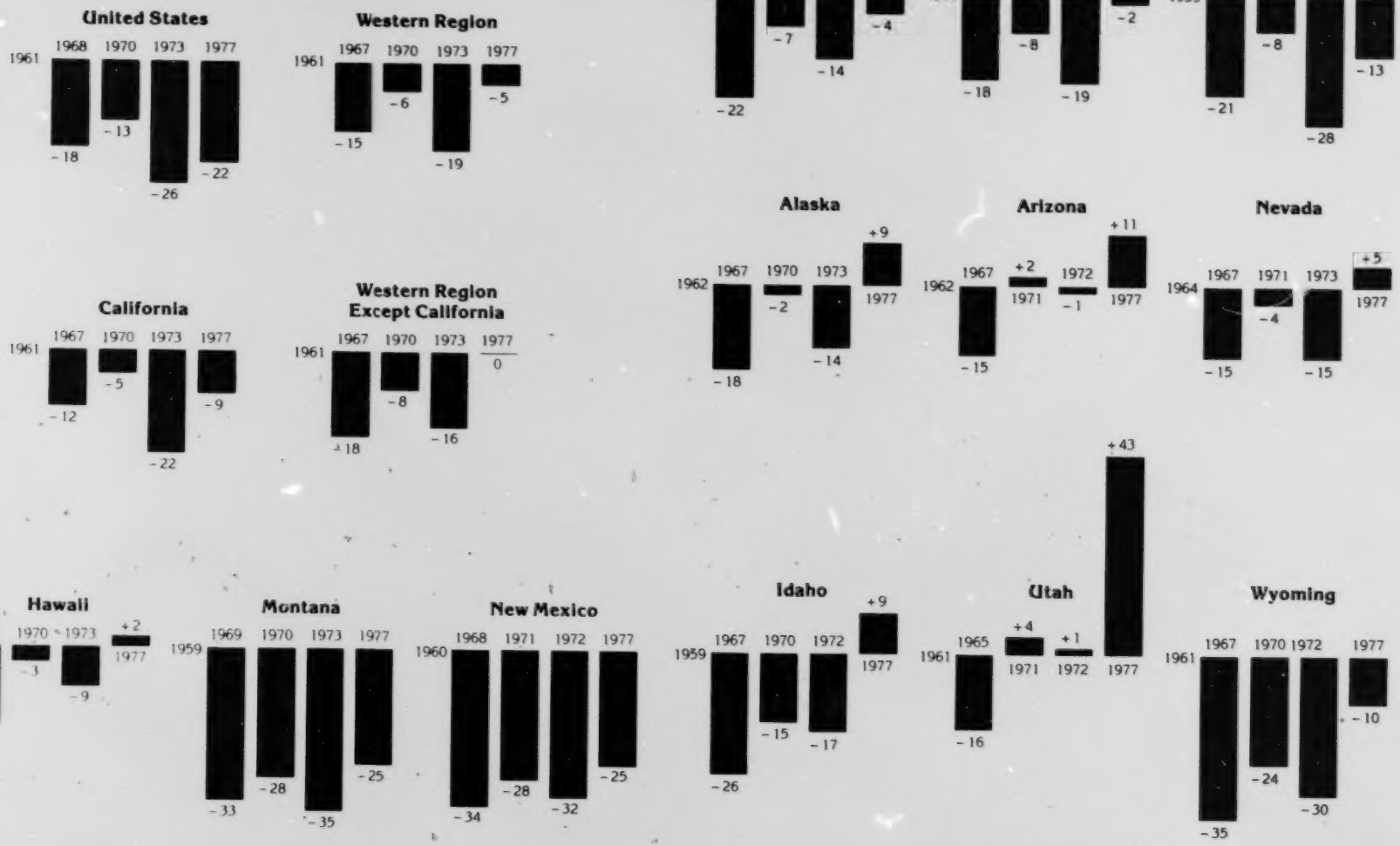


*Includes nonpublic schools.

Figure 2

Pattern of Annual Resident Live Births 1959-1977, Western States*

Percentage Changes from Peak Reached about 1960



*Source: State-level data reported to WICHE by each state.

INSTITUTIONAL RESPONSES

T. K. Olson

As I have talked to my colleagues in other states, I have discovered that Oregon--while it vaunts itself as coming out with bold and imaginative schemes--appears to have walked some of the same tracks as other bold and imaginative states. In the state of Oregon we are going through an effort to redefine the role and mission of institutions in order to bring them into line with the new realities of enrollment decline. No doubt you are doing the same. It's amazing, though, the way you can scratch around and find an old piece of parchment somewhere that says that even though you didn't offer X or Y kind of course before now, asking for it is not a 180-degree turn since it has been an historic role for that institution. It has never been exercised before, but now, with the new felt realities and the grass roots demand for this unique program, it is appropriate. I've heard that appeal from universities and colleges and community colleges.

The shifts we have noted in Oregon have been the same ones, I am sure, that you have seen: an increased interest in graduate students as opposed to undergraduates, partly because, in a public institution, graduate funding provides more money than undergraduate. Every time a graduate student replaces an undergraduate, you've added substantially more dollars. If you can manage to create a graduate program that's less expensive than some other graduate programs, then you've made a net profit. If you make the mistake of adding a graduate program that is so expensive that the state reimbursement does not cover it, however, then you're in the hole. So you have to be imaginative about the graduate programs you propose and imaginative in the ways you approach the instruction of students in high cost graduate programs.

There has clearly been a significant increase in the number of part-time students, and that affects program reviews in a way I will mention in a moment. And certainly the age cohort is shifting upward in all our institutions. Even in the independent colleges in Oregon--which traditionally have had almost only students in the 18 to 20 year old age group--the age level is increasing. This is partly due to returns from Viet Nam and partly to the fact that student financial aid works to the advantage of independent colleges as opposed to public. It is also true that some of the independent colleges in Oregon have been in the forefront of offering external degree programs specifically aimed at unique clienteles, including older students.

Continuing education is having an impact on enrollment, of course--in the historic credentialling of teachers with a need to be brought up to date in new research and techniques, in the drive of salary scales predicated on X number of hours taken at the post-baccalaureate level, in new occupations being created, some of which require a continuing education, and in occupations, such as pharmacists or CPAs, which under

Oregon law are required to have X number of credit hours in order to continue with certification or a license to practice. These people are all ending up at the doorsteps of institutions, and it is difficult to see institutions becoming reluctant to see more of them arrive.

There is a shift away from teacher education at the undergraduate level and an increase at the graduate level. There has been a decrease in lower division collegiate enrollments at the community college level and an increase in vocational enrollments, and perversely, an increase in the sort of "blah" category--the category which is neither lower division collegiate nor occupational, but which is called "other reimbursable" in Oregon. An "other reimbursable" includes everything from adult basic education, GED, and English as a Second Language, on the one hand, to famous courses like cake decorating, on the other. Cake decorating may be a recreational course, in which case it is not reimbursable (cake decorating for Clyde, who wants to suddenly try his hand at a flourish of making cakes for his wife), but it may also be a course to train people to become cake decorators in Ajax Bakery. It can fall in either category.

So those are the trends we have seen--and everybody else has seen. Let me mention some things now that we are looking at in Oregon which perhaps many of you are also looking at. One is credit for prior learning. We have talked about the impact of what is happening in terms of enrollment, and this certainly affects how we examine programs. To the extent that institutions grant credit for prior learning, it reduces the amount of time students spend in school, and therefore it automatically has the impact of reducing enrollment. In some cases, of course, it provides a kind of inducement for attendance. Perhaps you wouldn't have gone to school because it takes too long to get a degree, but here at Sigapoo U, we will give you credit for that marvelous life experience you had working in a foundry or helping with the Hottentots, or whatever. Then you might enroll for a degree where you would not have done otherwise; that can help enrollment. We have great difficulty in trying to sort out whether or not to approve a particular program which has a significant element of credit for prior learning built into it.

Another category I am interested in is technological changes. Radio was supposed to transform education marvelously and we were no longer going to have campuses. It didn't. Then we had television, which was going to transform education and dramatically affect enrollments; it didn't. Then we had the computer and the computer was going to dramatically affect enrollments and bring education to the home; and it didn't. I'm wondering if maybe we couldn't begin to use some of these things effectively, including that marvelous instrument called the telephone, and the video tape recorder. Let us postulate for a moment that with modularization of courses taking place at the institutional level, we are breaking down more and more the components of a course into tiny little parts. Each student comes in and takes a pre-test to find out which parts to take and then takes only the module he doesn't know. Then he passes that course and marches on to the next one. To the extent that that's occurring somewhere other than in medical schools or community colleges, it is happening in business.

It is possible that big business, Westinghouse and General Electric and IBM and Xerox, who have no fears of training their own employees through the use of technology, may in essence bypass the universities and colleges. They should be able to provide academic credentialling for a variety of courses and eventually, degrees. If we are postulating about the 1990's, why not talk about that? Why not talk about a bypass of the historic gatekeepers of education by the people who have the skills and the technology to do it. Can't you imagine the same people who turned out "the Beverly Hillbillies" turning out a new course in music theory? It does boggle the mind.

Another area we are looking at is program specialization. Increasingly, our state is looking at the problem of whether we can afford a certain range of programs and whether we should encourage specialized institutions to establish themselves for specialized purposes. We have one experiment going on in the state of Oregon right now that we will be watching very closely. It is a new graduate school for psychology, the only one of its kind. Not a dime of state money is going into it, just whatever federal monies they are able to gain in terms of research grants. You have often heard disgruntled academics talking about doing that . . . "By cracky, I'm so sick and tired of this blankety-blank I'm going through, I'm going to set of the Snort School of Economic Studies, and I'll have such a good school they will come and beat down my doors and I'll enroll them and bypass this whole thing." To the extent that they can succeed in getting accreditation or certification, such centers could affect us not only in terms of funding but in terms of the whole approach to certain kinds of education, graduate as well as undergraduate. That also leads into the question of reciprocity. Oregon and Washington are engaged right now in negotiations about reciprocity. We will be talking not only about tuition reciprocity, which eliminates the state border, but, I suspect, about programmatic reciprocity. That is, on a bilateral basis, we will be using the WICHE approach of looking at certain programs that we will not promote in Oregon and will want to take advantage of in Washington--and vice versa, at all levels, not only at graduate institutions but at specialized undergraduate and community colleges as well.

Increasingly, we as a state agency are looking at shared programs as a first criterion in program review. The burden of proof is on institutions to justify why they want to do it alone. Secondly, increasingly, we are asking the question of why we, as opposed to other states, should offer a particular program. And thirdly, why should we do it all? Either let the private sector, or perhaps find ways to approach it through technology to avoid our having to enshrine it in an academic institution. And then, lastly, a tough look at credentialling, and the reasons for enrollment in all forms of programs--in order to see if business, industry, or government should foot the bill.

The Challenge to Program Reviewers

Reconciling a responsiveness to fiscal and demographic relations with a concern for quality.

Patrick Callan
Director
California Postsecondary Education Commission

THE CHALLENGE TO PROGRAM REVIEWERS

Patrick Callan

The subject of program review, particularly the assessment of existing academic programs, is rapidly emerging as one of the central issues that will confront institutions of higher education, multi-campus systems and states in the 1980s and 1990s. My remarks will attempt to place this issue in the context of higher education planning and management, and to offer a perspective which may serve as a starting point for your discussions during this conference.

We know that the environment for higher education in the eighties and beyond will differ significantly from that of the last two decades. The impact of lower birth rates and changes in the characteristics of the population with respect to age and racial distribution will be felt by our colleges and universities beginning around 1983. We must plan to cope with these changes while, at the same time, dealing with the public's disillusionment with government and the growing movement to restrict revenues and expenditures. This movement may have run its course by the mid-eighties, but it may leave in its wake a series of constitutional and statutory constraints on government spending, leaving planners to face simultaneously the twin problems of enrollment decreases and fiscal constraints.

Ironically, it is fortunate for everyone but the planners that the era of most rapid expansion of higher education is over in almost all of our states. Our state systems of higher education are reasonably well-developed--perhaps overdeveloped in some instances. If the emerging fiscal constraints had been imposed in the period of rapid expansion, the problems would have been insurmountable. Unfortunately for higher education, because we will generally not experience significant growth, we are likely to be at a competitive disadvantage in bidding for available resources in the public sector, as the demands of other claimants--social services, energy, environment, health, etc.--continue to grow.

Perhaps the most significant long-term consequence of these increasing limitations on educational spending is that many states will not have the capacity to cushion the impact of enrollment declines. In a more optimistic time, we might have viewed a period of enrollment stability and decline as an opportunity to argue for new resources to enrich programs or to improve staffing ratios. While I am sure that such efforts will be made, I doubt that the resources will be available. Any state, system, or institutional strategy which assumes that new resources will be available to tide colleges and universities over the problems of the next ten to fifteen years is unrealistic.

This changed environment is not unique to a few states; it is not something that is going to happen to "the other guy." The differences

from state to state will be differences of degree and magnitude. While there are imponderables, all the indicators we have point in one direction: five and ten years from now, in most of our states, the systems of higher education will be smaller than they are today--in some cases, considerably smaller. None of the indicators mitigate this future. I suspect we have all indulged in hopes and speculations of windfall inmigrations coupled with possible changes in manpower demand which might increase college participation rates. And each of us nurses the fantasy that the inevitable will befall the rest of the world, but that our state (or institution) will be miraculously spared.

I am not suggesting that we know precisely what will happen. Even in the enrollment area, where we have such indicators as the size of various age cohorts, participation rates, and high school graduation rates, there are still a number of other factors we simply cannot predict, including the numbers of part-time versus full-time students, the credit loads that students will carry, and so forth. Admittedly, our capacity to forecast is limited, but I would remind you of Peter Drucker's point that the reason that we need to plan is precisely because we cannot forecast accurately.

In the absence of certainty, institutions, systems, and states which ignore the obvious, if not compelling, indicators do so at their peril, even though that is, for the most part, just what most of us have done. We cannot be faulted for the failure to anticipate the acute fiscal problems created by the widespread "taxpayers revolt," but the enrollment and demographic "surprises" were packaged eighteen years ago. We have to ask ourselves how we in higher education could have watched elementary schools close and enrollments in our public schools shrink without inferring the eventual impact on our colleges and universities.

I do not condemn, out of hand, the speculations and the hopes that enrollments might go up instead of down, or that public funds might increase dramatically. There is nothing wrong with such diversions unless they distract us from the facts and our responsibility. If we have a plan for a line that goes up, that's good clean fun; but if we don't also have a plan for a line that goes down, that's irresponsible.

I would suggest that this is a time for "bearish" planning based on conservative assumptions, and that at the heart of this planning lies the issue of program review. Program review is the cornerstone of the planning structure we will need to weather the financial and enrollment storms, the 1980s and 1990s, and must provide the central focus of our planning and management. It is important to note that this is a departure from what we have faced in the past--even for those who have already experienced temporary enrollment downturns and fiscal pressures--because we are now confronted with sustained fiscal and enrollment pressure. It is essential that we distinguish the ways we have dealt with short-term problems from the strategies needed to respond to long-term problems. In the short term, we are able to use expedient measures, to take emergency steps, to make

across-the-board cuts, and to avoid qualitative judgments. In the long term, a more sophisticated strategy is required if we are to preserve and enhance quality and access. If we allow our administrators, faculties, and governing boards to view this situation as one which will correct itself next year or the year after, if we encourage wishful thinking and deferred realism, we will be "setting up" our institutions for a series of unpleasant surprises.

Our ability to maintain control of our own destiny depends in large part on whether we are forthright about the problems and issues and whether we move to implement more rigorous program reviews, particularly those of existing programs, because politics, like nature, abhors a vacuum. We cannot afford the perception on the part of the public officials that we are failing to deal with our problems at the institutional, system, or state agency level. That perception in itself is enough to trigger increased governmental intervention in higher education. There are two sets of issues here. One is internal--what we do to maintain stability, quality and access during a difficult period. The other is how we deal with the external environment. I suggest that realistic planning is the appropriate strategy for addressing both the internal and external issues, and that program review is the essential core of that strategy.

I would like to move now from the broader context and focus on more specific aspects of program review, including its purpose, some of the obstacles, and some matters of procedure. First, we should establish the principle that the basic purpose of reviewing existing programs, and terminating some of them, is not to save money; rather, it is to maintain and enhance quality, vitality, and responsiveness during a time when large infusions of new resources through growth will not be forthcoming. It is a way of living with less money through internal trade-offs, not necessarily a way of providing refunds to the state. We must be very clear about this, because if we promise too much from program review, if we lead legislatures and state budget offices to expect immediate and substantial savings, we may buy one or two years of grace, but the long-term consequences will be disastrous. The faculty needs to understand that quality is an important objective of program review so that we have some hope of enlisting the endorsement and cooperation of the professional community. Legislatures, state budgeters, and governors need to understand this too so that their expectations will not be unrealistic.

Second, although the review, assessment, consolidation, and termination of existing programs is being forced upon us by external pressures, it is an innately worthwhile activity, something we should have emphasized all along. Rather than an evil forced upon us, review is a necessary and beneficial activity to which, during a period when our energies have been directed toward expansion, we have given only token attention and perfunctory performance.

Third, program review is an extremely difficult process. It is difficult because our colleges and universities and our systems (like most

social institutions) tend to be reluctant to embark on institutionalized self-examination. We don't like the kinds of questions that the people who review programs--even if our peers--tend to ask. It is also difficult because we lack the traditions and the management tools for this task. Finally, review is difficult because of complexities of internal governance. The collegial mechanism of an institution deals more confidently with issues of growth, where the primary concern is dividing up an ever-expanding pie each year. Here consensual decisions come more easily than when the issue is retrenchment. While the last eight or nine years have produced a few very effective efforts at the institutional, system, and state levels in dealing with these difficulties, by and large, the rhetoric has far outstripped the reality. We have lost precious time in establishing credible mechanisms that enable us to make this process work when the pressure is really on. I am reminded sometimes of the seer, Charlie Brown, who pointed out that "No problem is so big and complicated that it cannot be run away from." Some of our reactions have clearly been along these lines.

I am confident we can learn to deal with this era of retrenchment and constraint as successfully as we dealt with the era of growth. Those who persist and succeed will establish some basic structures and will learn much from their experience. But there is a certain, understandable queasiness about that first, perhaps long step into the unknown.

Among the important contextual issues in program review which deserve special attention, one of the most obvious is that of institutional role and mission. We need to look at the way programs fit institutional roles and the ways institutional roles fit systemwide and statewide goals. Many of the issues here involve questions of quality, societal need, and the most effective use of resources. Questions will have to be raised regarding the number of various types of programs needed and the appropriate institutions in which to concentrate program resources. To make those determinations we must begin to reassess and in some cases define institutional roles and missions. The issues here include quality, societal need, and the most effective use of resources. Immediately after the passage of Proposition 13 in California, Governor Brown appointed a blue ribbon citizens' committee, the Commission on Government Reform, which was chaired by Alan Post, the State's former Legislative Analyst. One of the Commission's recommendations was that California, having succeeded in the early 1960s in establishing missions for each of its three major public systems, needs to move in the 1980s to establish differentiated functions for campuses within each of those systems. I think the Commission was absolutely correct in that recommendation.

A totally ad hoc approach to program review is to be avoided at all cost. The ground rules need to be made clear at both the institutional, system, and state level, and must be established before the inevitable crises. Institutions, systems, and states should establish credible processes which most of those concerned agree to in principle or at least understand clearly before programs are reviewed or terminated. The ad hoc approach--waiting for the crisis and then attempting to deal with substantive and procedural issues at the same time--is the antithesis

of orderly and thoughtful planning. It guarantees great resistance, because it deprives the parties involved of that sense of "due process" which is absolutely critical in a consultative decision structure.

Good data and analytical techniques are important, but mechanistic approaches must be avoided. There is going to be a need, no matter how good our information or our techniques, to exercise judgment. After all, the exercise of judgment is what leadership is all about, and we should not wish it any other way. A formula or set of criteria may be useful in identifying areas which need to be reviewed but not in making ultimate judgments about institutional programs.

Interinstitutional cooperation at the regional level, whether it be interstate or intrastate, should be a part of program review. If we are to maintain an array of programs responsive to the needs of the people in our states, we cannot make planning and program review an isolated, institutional exercise. We should coordinate program reviews within states and systems to determine whether cooperative arrangements for offering programs might be appropriate. We should place greater emphasis upon interinstitutional arrangements, whether for sharing faculties or facilities, or for concurrent enrollment of students, or for reciprocity between states and systems, or public and private institutions. It is essential that we seek out more imaginative and less costly means to maintain and enhance the service we provide. One way we can accomplish that is to bring institutions into closer alliances.

My final observation is that those of us who work at the state level have a particular responsibility--whether we are in state agencies, state legislatures or legislative staffs, or state budget offices--to be sure that, as we approach this period, we do not destroy incentives for institutions to do those things that are most in the public interest. For instance, if all the resources freed by effective program review are immediately captured at some higher level, we destroy all incentive for leaders in our institutions to engage in what is really high-risk, high-conflict activity. If we cannot provide financial incentives in a period like this, we can at least provide flexibility. We should help key decision makers in state government to understand that flexibility becomes more critical as resources become more limited. On that issue I am somewhat optimistic; in fact, I believe that this is a good environment in which to ask for more flexibility. As the funds become scarce and legislators and governors find themselves saying "no" five times for every time they say "yes," the day may come when they will happily relinquish their franchise on such decisions. If they have confidence that processes which are rigorous, humane, and credible are operating at the institutional or system level, I believe they will tend to let these processes work. This does not mean that state governments should or will adopt a totally "hands-off" posture. It means that we can work with some hope of success for constructive incremental change along the lines of greater management flexibility. When we are insensitive to this need, we may extinguish the behavior that we seek to foster in institutions.

To conclude, the larger issue surrounding program review is that of self-definition and of conscious renewal of higher education in the years ahead. We know that no matter how well we plan, unanticipated events will overtake us from time to time, whether they be recessions, wars, or Proposition 13s. But we should know by now that if we have some sense of purpose and direction, we can respond to events more rationally than if we drift from one situation to the next. Sometimes our greatest enemy is our own sense of impotence in dealing with our problems. There is a widespread feeling that any change is going to be a change for the worse and there is a tendency towards passivity with respect to the future. While we cannot control or sometimes even anticipate external events, neither can we abdicate our responsibility for responding, if not anticipating, academic issues, and influencing, if not determining the academic future.

I can visualize two possible scenarios for the decade ahead. In one we withdraw, become defensive, and refuse to face realistically the issues of planning and program review. The conclusion of that scenario is the erosion of quality and public confidence as higher education moves further and further to the periphery of American society and away from the center of life in most of our states. But there is a second scenario, one that calls for leadership and a sense of purpose, for forthright recognition and anticipation of difficult problems, and for openness and rigor in attacking them.

The future is not, and has never been, shaped by those who refuse to acknowledge reality or to make difficult decisions when required. It is not by avoiding tough issues that American higher education has become one of the major achievements of our society. Our response to the need for planning and program review is but the next test of our vision, courage, and leadership--and our commitment to quality.

Thank you for listening.

The Current Status of Program Review Activities

A discussion of the WICHE-NCHEMS survey and some model practices.

Robert Barak
Director
Division of Academic Affairs and Research
Iowa Board of Regents

Lilla Engdahl
Staff Associate
WICHE Project on Expanding Regional Cooperation in
Graduate and Professional Education

Durward Long
Chancellor
University of Hawaii at Manoa

John D. Meyer
California Community Colleges
Chancellor's Office

William Phillips
Academic Planning Coordinator
Arizona Board of Regents

STUDY OF PROGRAM REVIEW

Robert Barak

For the last six months or so I've been serving as a consultant to NCHEMS on a study of academic/occupational program review both at the institutional and the state levels. The study itself had its formal inception last fall at a workshop for state-level academic affairs officers in Seattle where there was some interest expressed in a study of state level program review to follow up on and update one that Bob Berdahl and I did several years ago. There was also interest in finding out more about institutional program review and approval. I want to share some preliminary findings with you.

Before I get started, there may be a need to define a few terms. When I talk about program approval, I am referring to the process by which new programs are proposed, examined, and approved. When I talk about program review, I am referring to the review of existing courses. And to confuse you a little bit further, today I will be talking about both institutional program review/approval and statewide program review/approval.

One of the key issues that we have identified is the problem of the impact of state agency reviews and approvals on institutional autonomy. In going around the country, I found this to be both a real issue and a fabricated one. It is fabricated when institutions are merely responding in knee jerk fashion with outcries any time anyone outside the institution tries to influence the internal processes even if it is a legitimate exercise of authority. On the other hand, it is very real when state agencies overstep their legitimate interest and begin to poke around in matters which traditionally have been left to the institutions and their faculties and administrations. Perhaps it would be helpful if those of us who have served in state agencies are aware of some of the intrusions on institutional autonomy. Examples of the problems that arise range from an incompetent bureaucratic state agency staff to excessive demands on the institutions by external agencies. For example, one university provost indicated to me that his institution had just finished the process of a ten-year regional accreditation review. This consisted of exhaustive self-studies within the institution, numerous hours of working faculty committees, students and staff. During the same time period they had on campus nine professional accreditation evaluations taking place. These were also absorbing various amounts of administrative and faculty time. Some of these evaluations were in the process of closing down, others were in the process of beginning. . .but they were all absorbing large amounts of faculty and administrative time. This same institution was also a part of a state system and therefore the system office had program reviews that were also being conducted. In addition, this institution was in a state which had a coordinating agency for postsecondary education that conducted program reviews. Finally, the provost noted that the president of the institution had recently proposed that internal program reviews be conducted. The provost concluded his comment by saying that all of this review activity had to be counterproductive. He said, "If anything, these reviews should show that we're doing a lousy job of teaching (our main purpose) because we're spending most of

our time doing program evaluations." Had this institution been in another state, two additional evaluations would have been taking place. One large eastern state has decided that it will no longer approve a program for an indefinite period of time. From now on, every program is approved for one year only. That same state's postsecondary coordinating agency had decided that it did not like the regional accreditation visits, and so it was going to do its own. So, institutions in that state also have state-level accreditation visits, which essentially accomplish the same objectives that the regional accreditation visits do. There may be some legitimate reasons for questioning the value of regional accreditation, but it does seem to me that excessive demands for program evaluation are being made of the postsecondary institutions in this state. Somehow we need to reduce the extent of program review to more reasonable levels.

A second issue concerns our need to encourage good institutional management or, conversely, avoid discouraging good institutional management. An example of this issue was a situation in one state where an institution had done an excellent job of internal program review resulting in the cutting back of a number of programs. In addition, this institution had tied program review to their budgeting and planning process. Unfortunately, the decision was later made at the state level that resources of all institutions would be cut by 10 percent across the board. What happened was a real discouragement to that institution to ever again want to do internal program reviews in a meaningful way. Several of their sister institutions had not done any internal reviews and so the "fat" was still in place when they were told to cut 10 percent, while the institution that had been doing the good job of program review was actually penalized because the 10 percent cut went clear to the "bone." If anything will destroy meaningful reviews at the institutional level, across the board cuts without regard to institutional management efforts is certainly going to do it.

Let me move on to another issue--the relationship of program review to other on-going management processes. When I think of program review, I like ideally to think of it as an integral part of the planning and budgeting process, but unfortunately that's not always the case. In one state, for example, I spent three hours with the people who were doing the reviews of academic programs throughout the state. I moved from that office to the person who was responsible for <u>planning</u> for the state (who, incidentally, was in the very next office), but that second person didn't even know what programs were being reviewed or what the outcomes of the previous reviews had been. The same thing, unfortunately, happens at the institutional level. I remember sitting in one office where the associate provost had a whole wall of notebook binders, each one representing a particular review of a program. He was very proud of them. I asked, "What do you do with the reports after you've completed the review?" He stammered around a bit and finally admitted, "They just sit on the shelf." As I pressed further it appeared that there was no tie-in with budgeting and no one responsible for planning at the institution ever utilized the reviews. There again, the process of review was completed, but it wasn't tied to any of the other management processes in the institution.

Still another issue is the purpose for program review/approval. The purpose varies from institution to institution and state agency to state agency. The purpose for review at the various levels can be seen in terms of a continuum, with the institutional reviews at one end and the state reviews at the other. In an earlier publication I used the words "formative" and "summative" to

describe the differing emphases. Institutional review tends to be more formative while state-level reviews tend to be more summative. This is not to say that institutional review can't be summative or that state-level reviews can't be formative, but they are likely to be oriented that way.

Almost universally, every institution representative I talked to said that the reason for their internal reviews was program improvement. The exceptions, though, were the institutions doing program review because of financial exigency. Cutting programs in this instance seems to take top priority, although it is noted that weak programs were being cut in order to maintain the stronger programs.

Consumer protection was another purpose that was mentioned, usually as a function of the state agencies, especially those with responsibilities for institutional licensure.

Planning was yet another purpose for program review. While I did find some institutions using program reviews for planning purposes, this purpose was much more likely at the system and the state levels.

In some institutions the purpose of program review was tied closely to budgeting. At the state level, though, this purpose seemed more of a goal or promise than a reality. The programs selected for review depended a lot on the purpose of the review. At the state level there is the added consideration of time and resources--how many programs can be looked at in a meaningful way given time and fiscal constraints.

One last issue: One of the responses to our earlier study of program review is that I get a lot of requests to work with people at both the institutional and state levels on program review activities. One of the questions that inevitably comes in the beginning of our discussion is the question of "who has the best system." The implication is that there is an ideal system out there that will work for everyone and then they will plug that system into their own institution or state. I discourage this line of reasoning whenever I can. It is important to find an approach that is geared to the environment and circumstances of an individual institution or state. I think it's a mistake for any institution to pick up a program review/approval system from another and plug it in simply because it's been successful elsewhere. The same thing is true for states; what works well in one state may be a disaster in another state.

I think that developing a review process through broad constituent involvement is very important both at the institution and the state level. I was very impressed, for example, with one eastern school that used this approach in developing its program review system. The whole developmental process began with a speech at the beginning of the year by the president of the institution who introduced the effort and explained its purposes and goals and encouraged active faculty involvement. This started the faculty thinking along the lines of program review. This was followed by periodic up-dates of the program review activity in the campus newspaper. Because it grew out of broad campus-based involvement, the process was established with relative ease and a spirit of commitment by all involved. Initially the reviews were used to decide where the weaknesses of the institution were, and later when a financial crisis developed, it was actually used to eliminate weak programs without morale problems. I think the merit of the process was that people agreed on the process

before the crisis hit. Once a crisis hits, people don't think rationally and contemplate the various aspects of a sound program review system.

The last issue I wanted to touch on was the political repercussions of program discontinuance. In almost every instance where program discontinuance has occurred (save those programs which existed on paper only) there has been a political reaction. At SUNY at Albany it resulted in the reinstatement by legislative action of an Italian Studies program. Even private institutions are not immune to political pressures such as the reaction to a proposed program cut at the University of Pennsylvania, which is primarily a private institution. Somehow we need to develop ways of minimizing the political repercussions of program discontinuance. In this regard, I was glad to hear that the Southern Regional Educational Board (SREB) has a grant from the Ford Foundation to address the question of program discontinuance and institutional closure and to find ways to make those situations, when they occur, more palatable to the various internal and external constituencies.

PROGRAM REVIEW STUDY: AN INTRODUCTION

Lilla Engdahl

The study of program review which Bob Barak and I conducted involved extensive surveys of and interviews with representatives of state higher education coordinating and governing agencies, colleges, universities, and system offices in the West. I have asked a few of these people to share with us today some of the approaches to program review used in their states, as well as some of the issues which their experience has enabled them to identify as important in the conduct of program review at both the state and institutional levels. These are all people intimately acquainted with the problems and possibilities which program review offers.

The complete report of our study, including state-by-state profiles of actual practices, will be published with the proceedings of this meeting. I expect that report to answer most of your specific questions, but I will be pleased to answer any you might have at this point. I am sure that our speakers will also respond to questions following their presentations.

HAWAII

Durward Long

The University of Hawaii is a multi-campus institution consisting of: A major comprehensive research university campus of 21,000 students (Manoa); a second complex that enrolls 3,000 students in four-year colleges of liberal arts and agriculture and a community college (UH-Hilo); a new and very small upper division program (West Oahu College); and six community colleges organized as a subunit. Each of these four major units is headed by a chancellor responsible to the president of the University. The University faculty and staff are unionized and we bargain collectively, energetically and constantly (little about this relationship yet).

Hawaii is unique in that its higher education budget is not enrollment driven; rather, it is politically driven. Also, despite the legality of its Program Budgeting systems, which was established with the help of John Keller, whom many of you know, it is more a form and a technical form at that, and the reality of program budgeting and/or performance budgeting is a far cry from the literature about it.

During the 1960's the University of Hawaii had an exceptional experience in state funding. Behind the leadership of a governor who made higher education one of the top priorities of the new state and its future, the government provided generous financial support to the University in budgets that more often than not exceeded the University's request.

This all changed in the early 70's and rather abruptly; in the 1971-73 biennium, the University's support was drastically reduced by eliminating funds and positions amounting to more than a hundred positions. (Appearance of Grant Strategy.)

Among the many reactions within the University was one by the Manoa Academic Senate which established a "Program Review" policy and procedure requiring the review of each academic program every fifth year. Shortly afterward, the Board of Regents enacted a similar policy pertaining to the review and evaluation of current and new programs in all campuses.

The Board policy, approved February 8, 1973, required that each established instruction, research, and public service program be reviewed every fifth year. It stipulated that "at a minimum, these reviews must consider program objectives, priorities, target groups, costs, funding, faculty, facilities, measures of effectiveness, and continuing need and demand," The policy delegated to each campus the responsibility for developing its own five-year program review schedule and for submitting an up-dated version annually to the Office of the President. The reviews completed each year are required to be submitted to the Office of the President in "the prescribed evaluation format." "Primary responsibility for setting program priorities, developing new program proposals, and

evaluating existing programs rests with the faculty, students, and administrators at each campus."

In addition, proposals for new programs were required to be reviewed by the Board, and if approved, they become provisional programs to be evaluated at the end of the first complete cycle. No tenure decisions or commitments may be made during provisional status.

The University Administration developed a program review format for new and established programs known ominously as PPB #10. The three major units (our fourth unit began in 1976) developed their own internal procedures and additional formats, and the process of systematic review began with the 1973-74 academic year, with the first reviews due in the President's Office no later than June 30, 1974. In addition to the requirements of the Board and the University Administration, each Unit established its own procedures. The Faculty Senate and the Chancellor's Office of Manoa, our comprehensive University campus, required the Senate's involvement at the last review step prior to the Chancellor's review.

The 1971-73 fiscal and position reductions in the State's appropriation had also caused the Manoa Faculty Senate to declare a moratorium on new graduate programs. The year following, the University Regents, under pressure from the State Legislature alleging overexpansion of graduate and research programs at the University, declared a moratorium on graduate programs pending a collective review of the administration of graduate programs at the Manoa campus, including the criteria for new programs. This review was conducted during 1975-76 and the moratorium lifted by the Board in 1976.

Another action taken by Manoa is also integral to this story. In 1974, in consultation with the Western Association of Schools and Colleges, the campus decided to link its accreditation review with the program review. The decision included an agreement that the self-study aspect of the accreditation review would be carried out by the program reviews and that annual visiting committees from WASC would focus on the programs reviewed for the year of the visit. Manoa's schedule of reviews had attempted to link programs of similar nature or close interrelationships for each annual review.

The process originates at the department or program level, proceeds to the college level when the review committee is supplemented by faculty from other colleges, then to the college dean, and then to the Senate Executive Committee who transmits to the Chancellor. The Unit Chancellor transmits a completed review to the Vice President for Academic Affairs with copies of his "closure" memo and, if Board action is required, a recommendation for that action. While research institutes do utilize teams of experts outside the Manoa campus and the State, the instructional programs do not. Neither is required or prohibited from using outside experts. The instructional programs have considered the one expert on the accreditation visitation committee as sufficient.

In the community colleges, programs are reviewed at the level of concentration on majors offered in the associate degrees and at the divisional level for the general core requirements. The relatively short time required to produce a graduating class has seemed to increase the opportunity for program adjustments in contrast to the University campus. After the first level of review, the community college campus provost (the chief campus administrative officer) makes an evaluation and transmits the document to the Chancellor. The faculty senates do not become involved in the process in the community colleges, simplifying it somewhat. The Chancellor submits completed reviews to the Vice President for Academic Affairs who makes an annual report to the Board of Regents.

The linkage of the review process to the allocation of resources is unstructured and incidental, sometimes almost as if by serendipity. But the uncovering of serious quality or accreditation problems leads to action! We have inaugurated an Authority to Plan step and a "Special Study" status for programs indicating problems.

The University is now completing its fifth year of the program review process and is beginning an in-depth evaluation. We have reviewed at some level over 200 programs, although only 120 have reached the Universitywide or system level of which eight programs were discontinued. This is a 48% rate of on time completion of the cycle, although all began on time. I am pleased to share with you some of our tentative findings.

My first observation is that the Manoa Faculty Senate really got out front on the issue of program review and then lost it. The administration tried to strengthen and support the initiative but somehow failed to make it as effective or as positive as it might have become and managed to create negative reactions. There are few institutions to my knowledge where faculty organizations have themselves initiated structured review process beyond the department. Of course, it is also clear that by seizing the initiative with the extended and laborious process the faculty protected its role in the review and probably minimized the use of review for fiscal decisions.

The second observation is that the mixture of purposes and objectives in the establishment and use of the reviews compromised their value to the institution. The origin of the review policy and process at the flagship campus seemed to reside in a desire among key faculty leaders and the campus administration to make appropriate program adjustments (especially contraction, discontinuation, or moratoria) in a temporary fiscal crisis and to put in place a process by which future adjustments would be made if the fiscal crisis continued. The Regents' and Administration's objective seems to have been similar at the outset although it is clear that the Board firmly believed that there were weak or high cost and low priority programs that should be discontinued as a result of the review and that the sunset approach should be applied. Perhaps

it is fair to say, however, that most of the faculty quickly determined to use the program review process for diagnostic and improvement purposes only and senatorial courtesy prevailed. The Regents gravitated to the position that the review process was intended primarily to target programs that should be discontinued. A review of the history, files, and current impressions reveals that the behavioral responses had not been calculated carefully enough for steps to be taken to increase the probability of positive implementation. For example, the behavior of the faculty over time has come to reflect their view that the entire process (which was initiated by the Manoa faculty) is simply another ritual that serves the bureaucracy, especially the farther removed levels of administration and the Board.

Third, "Program" was not adequately defined and as a result, it was translated "organizational subunit" by some campuses, and degree majors at others, to create a bit of confusion. Prior to the Review policy, there was not a stated policy on Regents authorization of programs. Nor was there a real Academic Plan.

A fourth finding is that the process is so stretched out in terms of multiple reviews that it is unclear which review level is responsible for what. Therefore, each level simply transmits it to the next.

Fifth, at the policy level, there is an absence of criteria to be applied in the program reviews. While need, value, quality, and priority are mentioned in the rhetoric, they are not stated in operational terms. Succeeding levels have focused primarily on the ouality of the program being reviewed. Staff planning for personnel reallocation, rearrangement, and renewal needs to be included.

Sixth, the conspicuous absence of a review policy for administrative and support functions, organizations, and programs has contributed to the notion that instructional programs are special targets of review for the purposes of discontinuation. We already focus too much analysis on instructional inputs in our institutions.

Seventh, while the various academic plans of the campus have been influenced and tempered by inferences growing out of program review, the review process has not served to establish priorities in program development. It has permitted short-term decision/shifts toward long-term objectives.

Eighth, examining programs by a one-fifth slice on an annual base or a two-fifths cluster for a biennial term has not contributed toward evaluations by comparability or as a campus-wide entity such as a self-study would provide.

Ninth, program review may actually obscure priorities and reallocations (as PPBs emphasize data on the expense of policy). In linking it to budgets we have little experience and understanding in predicting trade-offs.

Tenth, the process, while logical, is very costly in the expenditure of phychological and physical energy and contributes to constant uncertainty.

Eleventh, the use of the annual reviews in the accrediting process is also logical and promises to conserve energy, but it has changed fundamentally the accrediting function, and in my opinion, has served an unintended substitute for an all-campus review. Moreover, it has proven much more expensive in terms of fiscal costs, coordinating duties, and report processing. I would not recommend an identical repeat of the method we've used.

Twelfth, the "classes" of action to be taken as a result of the program review need to be clearly known by all participants. At the moment, in our program review, the imagery is that one of two primary actions is expected, to continue or to discontinue the program. Of course, a number of other less "final" actions are taken by the various participants in the process but since the range of actions likely at different levels is unknown, the reviews are quite defensive.

A thirteenth major finding is that our present review is based so much on unit and subunit evaluations that there is almost no opportunity to look at curricula needs and programs across the system or even across the campus. Health sciences, agriculture, etc. never come together.

Our fourteenth finding is that program review and academic planning have to be linked to the sources outside of the institution to be viable and effective. Program review is really a political process; we're going to have to become accustomed to involving people outside the institution in that process. I know that sounds like capitulation, but the kinds of programs we offer in a public university may be a matter of public policy. This is the point I want to close on. We've learned a great deal from program review. We have now come to the conclusion that we really need two kinds--one for the department to do on its own, and another, a quantitative review that identifies certain peril points in the program. And at that point, we may need to use consultant teams, someone who has no vested interest in the outcome of the review, to make qualitative judgments.

Our conclusions at this time are:

1) It is essential to articulate clearly why we do what we do;

2) The policy for review initiated by the faculty was a healthy positive step; faculty support and understanding should be the basis of any program review;

3) The reviews have influenced attitudes and behavioral patterns for which insufficient thought and planning were given; behavioral objectives must be thoroughly anticipated;

4) The reviews have probably denied campus-wide or unit-wide and certainly university-wide self-studies and priorities;

5) Much of the data section is left to the department or program to locate, use; University Administration needs to provide official data to each program;

6) We must develop a simpler process that includes "branching," based on certain findings, uses outside expertise, and one that states more quantitative criteria as reflective of a peril or quality indicator.

7) We are now considering ways to initiate and institutionalize flexibility in program completion/composition;

8) We are, as a result of all this, considering radical change in program review; quantitative peril points; campus review for quality.

We hope that our experience will be helpful to other institutions developing new systematic program review systems.

CALIFORNIA COMMUNITY COLLEGES

John D. Meyer

The California Community College system includes district organizations ranging in size from a single college to nine.

At the state level the Chancellor's office is involved in program review prior to program implementation. We published a handbook on program review procedures two years ago. Because of the existence of both multi-campus and single campus districts, we often face the question of local autonomy. The history of the development of the California community colleges is one in which the district and the local institutions have jealously guarded their local autonomy. In fact, the law under which we carry on the program review activities stipulates that we must make every effort to preserve local autonomy, and we are reminded of this whenever we suggest to an institution that it should not offer a certain program.

All community colleges in California are comprehensive, which means that they are involved in vocational education. In the past this has meant that Vocational Education Act funds have been available to the colleges for certain kinds of research projects. One of these projects has resulted in a program review process which has come to be known as the Community College Occupational Program Evaluation System (COPES) and is the major thrust of my comments here. COPES started in 1971--long before Proposition 13. It is a qualitative review process for programs and involves advisory committees composed of all segments of the population including industry leaders, program graduates, and present students in the program. First, the faculty, students, and administrators are asked to fill out a questionnaire which asks a response to a set of qualitative evaluation questions. The answers are summarized through the use of a computer at Foothill Community College, and the printout is given to a visiting team made up of people who know about the subject matter of the program being reviewed. This team validates the results of a self-study prepared by faculty and administrators from the program by contacting the people who contributed the questionnaire answers. In 1977 only the Home Economics and the Administration of Justice programs were reviewed. At that time, eight colleges from each of these programs were selected around the state and each program reviewed in depth at those places. The requirements of the Vocational Education Act stipulate that evaluation is a condition of receiving further federal funds, so our design was to use this process to satisfy that requirement.

In an effort to expand and improve the use of COPES we have divided the 106 colleges into four stratified samples and established through statistical techniques that each of these samples is representative of the entire system. In this plan, every four years each of those colleges would go through a review of its entire occupational program. Special interest areas such as "administration of justice" could be reviewed on an ad hoc basis.

Proposition 13 had a detrimental effect on our intent to embark on this scheme because it reduced our staff and funds. We had planned to do a random sample out of each of the stratified samples in order to validate the process, but funding cutbacks meant that we only visited one college. We did experiment with that one visit this past year by tying it to the previously scheduled accreditation visit. The results of this visit are not all in yet. A great many reporting activities were demanded of that college at that time, however, including a Department of Finance requirement--all within about six weeks--and so the test was not as good as we had hoped it would be. Our hope is that we will be given the necessary funding to expand our activities systemwide for the next fiscal year.

In addition, we have another Vocational Education Act program review process as the result of the development of two books called Guidelines for Occupational Planning. These are handbooks for planning and developing programs. They also take up the questions of how programs might be discontinued. (These have not been top sellers among the colleges, but we have them available, anyway.) Proposition 13 has had another peripheral effect on this area. The major districts, Los Angeles in particular, are beginning a rather intensive program review on their own in which they are looking at quantitative data--the number of students enrolled, number of graduates, and so on. We are trying to keep the COPES concept separate from this quantitative evaluation, though the discontinuance of programs necessitates looking at both qualitative and quantitative data together.

ARIZONA

William Phillips

A few months ago when I was asked to serve on the panel at this workshop, I agreed, thinking that I would be expected to present a truly model practice of system-wide academic program review. After spending four years in this sort of activity in another state, I had come to Arizona and had been able to design and develop and put into place a completely new academic program review system which I had hoped would draw upon all the good practices and avoid all the pitfalls which I had discovered through personal experience and communications with colleagues in other states.

I do have such a model of a system-wide program review which I would be pleased to share with any of you who would like to read it. Briefly the Arizona system proceeds along two separate lines: each institution is mandated to conduct internal reviews of all academic programs over a ten-year period. While the reviews are conducted by the institutions involved, it has been my experience that colleagues in other departments are likely to be as critical of the program quality of someone else in a university as any outside critic who might be brought in. Thus, these reviews do not tend to be entirely self-serving, as might at first be imagined. The results of these reviews are presented to the Regents' Central Office as each review is completed.

The system-wide phase of this activity is conducted on an "as indicated" basis and it focuses on duplicative programs which may be flagged for system-wide review upon significant deviation from regional and national norms or other indicators taken from a list of 15 such indicators for identifying programs for system-wide review. Once an area has been selected for system-wide review the universities involved prepare lists of outside consultants whom they would consider completely acceptable. All of the names submitted are put on a single list and then each university is permitted to ask that any consultant be removed for cause. Those consultants whose names remain on the list are obviously acceptable to all of the institutions and it is from this group the final consulting team will be chosen by the Central Office. Prior to each consultant's visit each institution compiles data and other information in an agreed upon format. The consultants are then brought in to look at the programs. They write a report that is reviewed by the respective institutions for factual errors before it is shared with the Regents. Eventually the report goes to the full Board.

The consultants are asked to look at the quality of the programs, the resources available to the programs, the outcomes of the programs, the program costs, and other factors. The consultants visit with university administrators, faculty, students, persons from the community, and representatives of any professional group that would be involved with the employment of graduates of the program under review. Finally the

Board of Regents, after reviewing the consultants' reports and recommendations from the Central Office, may take actions to leave programs in the status quo, establish new programs, strengthen existing programs, modify existing programs, or phase out or discontinue existing programs.

This is the system of a system-wide review which we have in place. I could say a lot more things about this model, and will be pleased to discuss it with anyone who is interested. Although we have not completed a full cycle of this activity in Arizona, I can predict with great confidence that it will work about as well as these processes work in other states. That is to say, there will be a lot of activity at both the institutions and in the Central Office; the end result will most likely be that few programs will be terminated, and those which are will be quickly replaced by something equally as expensive at the institution that lost the program.

With the foregoing in mind, today I would like to describe a different approach to program review which we are in the process of carrying to its completion in Arizona at the present time. This process is based upon the assumption that the internal, academic questions in program review are much more easily answered than the external, political questions. Therefore, instead of having a team of academics review programs to investigate the academic quality of the activity, we began with a process intended first to defuse the external issues.

Before proceeding further, I should make certain that you understand the background of the higher educational situation in Arizona. Arizona has a population of approximately two and a third million people who are served by just three public institutions of higher education. These three universities enroll 77,000 students on a head-count basis, about 63,500 FTE. There is only one private, accredited, four-year institution in the state--a church-related school with an enrollment of about 1,300, and one accredited upper level, non-traditional proprietary institution with an enrollment of approximately 200. There are several non-accredited institutions and several out-of-state operations active in Arizona. More than half of the state's population is located in Maricopa County, the home of Arizona State University, and approximately 25% of the state's population is in Pima County, the home of the University of Arizona. In many respects, Arizona is one of the most urbanized states in the nation, with more than 75% of the population residing in major metropolitan areas.

The program review in question concerns agricultural programs and was brought about by the fact that agricultural programs are being offered at both the State's land-grant institution, and another university having a Division of Agriculture located in the College of Engineering. The non-land-grant university does not operate an extension service, but it does have an experimental farm and, to all intents and purposes, the public can tell little difference between the activities of the two agriculture programs. The existence of the duplicative agricultural programs has been the subject of considerable interest by the Board of Regents, a

constitutional governing body with jurisdiction over all three public four-year institutions, for a number of years. As recently as 1971 a committee had been appointed to investigate the situation.

It was against this background that in November of 1978 the Regents appointed a seven-member committee, composed of two Regents who had agricultural interests and five prominent agriculturists from the state. The five lay members of this group hold the key to whatever success this effort will ultimately enjoy, for they represent all of the major agricultural commodities grown in the state as well as all agricultural regions of the state. They include men of impeccable credentials: a former president of the State Senate, a former president of the Milk Producers Association, a former president of the Beef Cattle Association, a former president of Cotton Producers, etc. All five individuals are men of considerable expertise and reputation in agricultural circles, as well as having influence throughout the state. The Committee met, with the Regents' academic officer serving as Secretary of the Committee, for six full days spread over a five-month period. During its investigations, the Committee visited both universities involved, meeting with administrators, faculty, and students and visited all of the university farm properties located throughout the state. Two parts of the final report, all of which was unanimously agreed to by the Committee, dealt with the experimental farm properties and the agricultural extension service. The third part of the recommendations, in which you might be interested today, dealt with academic programs. The Committee reached the conclusion that the academic programs operated by the two institutions are unnecessarily duplicative, and recommended the disestablishment of the division of agriculture at the non-land-grant university.

The conclusion was neither novel nor unexpected. Indeed, almost any group which might have been brought in from outside the state could have easily recommended the same action. The programs recommended for discontinuance are more expensive than those at the competing institution, lack the resources, and simply do not have the potential for excellence of similar programs at the land-grant institution. The Committee did recommend that the adversely affected institution should concentrate on agribusiness programs but that these should be based in the College of Business Administration, not a Division of Agriculture. The Committee was also willing to leave agricultural engineering programs, which were already integrated into the school of engineering, in place.

Unfortunately, I cannot give you the final outcome of this scenario. The Board received the report at its May 25 meeting, which happened to be at the university whose program was recommended for termination and was confronted by a large and fairly hostile crowd of faculty and students who felt that they had something to lose by the adoption of the recommendations of the report.

None of you who have participated in a review of an academic program which results in a recommendation for discontinuance will be surprised

to learn that the report, which was initially distributed only to Regents and University Presidents, was somehow leaked to other groups and widely distributed, or that a number of letters seeking support from the public were mailed using the postage meter of the university which might be adversely affected. In deference to the large crowd, the Regents have scheduled a public hearing on the subject in order to give everyone who is interested an opportunity to speak. It is anticipated, however, that action will be taken no later than the July meeting of the Board. While I would be extremely foolish to predict the vote of the Board on any issue, it is important to note that the governor and both of the Phoenix newspapers have spoken strongly in favor of adopting the recommendations of the report. It would be surprising if most of the Committee's recommendations were not adopted.

I wasn't joking, then, when I told you that this was an example of program review from Z to A. The political issue has been tackled first, on the assumption that there is no point in doing the academic work of program review if the politics of the matter will preclude or thwart any actions. If the hard decision is made to discontinue the program then a great deal of work must be done by the university, with the guidance of the Central Office, in determining how best to deal with the program pieces which may be left and how to handle the discontinuance. This is an especially critical issue since the Committee has recommended that a part of the program--agribusiness--be retained at the university but be shifted to another college. I think the significant thing about this review process, however, has been that, while the conclusion of the Committee was obvious, and perhaps inescapable, had this conclusion been reached by a group of visiting academic experts, there is no doubt in anyone's mind that the adversely affected university would have countered with recommendations made by its own experts, no doubt, equally prestigious, who would have recommended to the contrary. The possible result would have been an impasse between experts, and it is likely that the Board, facing the political realities of making an unpopular decision, would have found ample justification for doing little or nothing at all. Instead, this process has gone to the heart of the matter by coming to grips with the really tough question--the critical one of whether or not there should be two agricultural programs--with the assumption that once this has been dealt with, the academic process may proceed along a more rational and unhurried course.

I regret having to give you so incomplete a report and will be pleased to bring any of you up-to-date on the final outcome of these actions in July, or at whenever time the Regents take their final action. However, I believe that several conclusions can already be drawn from this model of program review. First is that the political decisions are the ones which are really difficult to make. Even a constitutional Board of Regents whose members are appointed to eight-year terms is not insensitive to personal and political pressures. Indeed, the very process by which Regents are appointed, i.e., nominated by the Governor, confirmed by the Senate, insures that they are a part of the political

scene. Second is that while any action which the governing body attempts to impose upon a university is likely to be vigorously resisted by the university, this action is more likely to be successful if the Board can feel that it has a strong basis for that action and defenses from outside the educational system. Third, and perhaps the most significant, is that the academic considerations may well profit from their taking place after policy issues have been dealt with and disposed of. Of course, this model will only work with those programs which are professional in nature, or have any employee group that is clearly identifiable. The next programs targeted for this treatment, incidentally, are Schools of Architecture and a School of Mines. I shall be pleased to attempt to answer any questions which you may have about the process I've described.

Program Review in Postsecondary Education: A Return to Judgment

The relationship of program review to evaluation.

Edward F. Kelly
Professor
School of Education
Syracuse University

PROGRAM REVIEW IN POSTSECONDARY EDUCATION: A RETURN TO JUDGMENT*

Edward F. Kelly and Thomas Johnston

Introduction

The processes of program review, whether viewed at the institutional or statewide level, are analogous to the activities of educational program evaluation. As a result, program reviewers will confront some of the same issues and problems that have become the truck and baggage of the program evaluator. We argue that, like the activity of program evaluation, the process of program review is essentially directed at the development of publicly justifiable judgments of worth. These judgments form the premises of an argument that is made with respect to a specific educational program. The argument is principally a practical one, one that leads not to new knowledge but to a decision to act with respect to an educational program. With the context defined as that of the practical argument, we will discuss the process of program review and its relationships to educational evaluation. Having offered some arguments on definitional similarities, we discuss in turn the issues that program review will confront and then we suggest several alternative replies to these issues. This paper concludes with a set of questions that we believe will benefit the activity of program review.

Evaluation Defined

Definitions of evaluation tend to be various and at times conflicting (Worthen and Sanders, 1973), but there appear to be at least three facets that such definitions share. Evaluation is directed at the determination of worth (Scriven, 1967). Evaluation is intended to assist decision making (Stufflebeam, 1969), and evaluation is quintessentially a political activity (House, 1974, 1978). In this paper we take the view that evaluation is a methodological activity intended to develop descriptions of programs and judgments of worth to facilitate decision making.

Building descriptions of educational programs requires that evaluators construct logical and empirical renditions of the conditions, activities, and outcomes of programs (Stake, 1967). One hoped-for effect of this activity is that people who do not participate in a program, but who may be required to make decisions about it, will have a reasonable basis on which to know what it must have been like to be there. In a similar fashion, the requirement that evaluation be directed at the development of judgments of worth (Scriven, 1967) entails the collection and weighting of evidence about the

*This paper was prepared for presentation at the WICHE-NCHEMS Workshop on Statewide and Institutional Postsecondary Education Program Review, June 4-6, 1979, Sheraton Airport Inn, Millbrae, California.

worth of a program from one or several points of view. These points of view generally represent different standards against which the program may be judged, and consequently, perceptions of program quality and adequacy frequently vary depending upon whose standards are used for judgment. In response to this multiplicity, Stake (1967) argued that evaluators ought to be in the business of collecting and reporting the judgments of others, while Scriven (1967) argued that evaluators would, by definition, be required to render a specific judgment of worth.

The argument that evaluating is best understood as a service system to decision making is well represented by the works of Daniel Stufflebeam (1971) and Marcia Guttentag (1975). Stufflebeam defined evaluation as the "process of delineating, obtaining, and providing useful information for judging decision alternatives" (p. 129). In an excellent analysis, he argued that decision makers at the local, state, and federal level most often require different types of information and that the same data will not usually meet the needs of decision makers at different organizational levels. For example, information that may be important to local program people as they attempt to improve their programs (what Scriven [1967] called formative evaluation) is usually of little use to state level personnel attempting to decide whether a program or project should be re-funded or accredited.

Evaluation as a Practical Argument

It is at this juncture, the relationship between information and decision making, that the activity of evaluating is best understood as a consideration related to policy analysis, policy research, and policy formulation. It is also at this point that the applicability of the practical argument as a framework for understanding evaluation is best presented.

When we speak of the practical argument, we mean a logical argument that employs a set of premises that are filled with valuational and belief claims, premises that support a conclusion to act. In one respect, when we give reasons that are intended to justify a decision that we have made, we are articulating the premises of the practical argument that led to that decision. The activity of discovering and exposing the premises of the practical arguments in the minds of decision makers is a primary activity of program evaluators, one which they must become more sophisticated at conducting. Program evaluators need to be more sophisticated at doing this because the premises of these arguments are frequently incomplete or not clearly stated. Furthermore, all exposed premises are not necessarily true, and false premises need to be detected since they bear heavily against the acceptability of the conclusions of such arguments. The process of identifying the premises of the practical argument and thence of publicly portraying them is the heart of the matter of program review.

One of the oldest and most traditional models of evaluation, the accreditation model, is a prime example of the relationship between evaluation and the practical argument in a decision context. Glass (1974) identified the development of three major models of evaluation and argued that the accreditation model was the oldest of the formal evaluation processes dating back to the early 1900's.

In addition, in a recent and highly important analysis, House (1978) has shown how evaluation is possessed of a logic of argument and how, further, the warrant of any evaluative activity is that it persuade the client or decision maker of the credibility of the evaluative claim. This activity of developing persuasive evaluations is a highly political process, because it is intended to justify the selection of one person's or group's preferences as those of society at large (Riker and Ordeshook, 1973). This process requires a sensitive professional response to the varying beliefs and value dispositions that represent the groups that participate in, and are affected by, any program evaluation.

Implications of Defining Evaluation as a Practical Argument

To say that evaluation requires the determination of the worth of a program means that we must first believe that it is reasonable to argue from empirical evidence about a value laden premise. In a fashion similar to that argued by John Dewey in his Theory of Valuation (1939), the implication is that it is reasonable to believe that the goodness of a program, a value laden consideration, can be empirically verified.

A second implication is that there is a discernable level of rationality in our program decision making, and that the discernable level is efficient. Inefficient rationality means that the correlation between the quality and quantity of information that is available and the excellence of decisions that are made is much less than perfect. Some of this lack of correlation probably results from a failure that has typified many evaluations: failure to attend to the differing belief systems that their clients held (cf. House, 1978).

The third, and possibly the most important implication of this posture is that evaluation as an activity will maximize one set of social values at the expense of another. This process is important to understand and recognize for it, too, lies at the heart of the matter of both public policy formulation and program evaluation. It is the political ordering of social preferences that the program evaluator needs to be sophisticated at developing, and it will be the same ordering that the processes of program review, whether viewed at the local or the statewide level, will have to be effective at detecting. Program review, like program evaluation, must be understood as a political process, intended to affect policy with respect to social programs, institutions, and priorities.

What Counts as an Evaluation? Some Comparisons

As a result of these definitions and this analysis, it follows that a number of other activities that frequently appear in social and educational program analysis must be understood as essentially different from the activity of evaluation. For example, the program audit, a process intended to examine the relationship between the expenditure of funds and acceptable budgetary categorizations, while being a useful accounting process when well conducted, is not an evaluation because it does not intend to document the worth of the program concerned.

Similarly, other important developmental and descriptive activities such as survey research, operations management, and organizational development, although they perform important functions, are not to be confused with program evaluation. Although organizational development efforts, for example, may utilize evaluation studies, they are not themselves evaluation efforts because they do not intend to develop descriptions and judgments of program worth that are intended to facilitate decision making.

Other well-known activities such as cost effectiveness analysis, cost efficiency considerations, and cost benefit studies are usually not acceptable as evaluations unless they overtly claim to present descriptions and judgments of program worth. Ellis Page's (1972) argument about the need and desirability of a standard measure of educational benefit which he called a Bentee may be an example of a bridge work between cost benefit analysis and program evaluation properly combined. Unfortunately, evaluators have not been able to find a socially acceptable benefit standard score for educational programs. Curiously, program review processes may imply one in that they require a judgment of the social benefit of an educational program.

Efforts to structure program expenditures more effectively and efficiently, such as program planning and budgeting systems (PPBS) and the use of zero-based budgeting models, are not evaluations for the same reasons as described above. They are eminently political processes, just as evaluation is (cf. Wildavsky's The Politics of the Budgetary Process, 1974), but they are not evaluations.

In what follows we make the assumption that the activity of program review (PR) is ultimately intended to establish the worth of postsecondary educational programs and that the information that is gathered under the aegis of PR is intended to inform and influence decision in the public arena. Given that this assumption is true, we argue that PR means Program Evaluation (PE). Thus, PR = PE, and as a result, the considerations of PE should be used to frame any PR effort.

If Program Review Equals Program Evaluation, How Should It Be Done?

We begin by asking two important questions about PR, questions that are often asked about the activity of program evaluation. These questions are: (1) How reasonable is it to conduct program reviews? (2) How realistic is it to conduct program reviews?

(1) How reasonable is it to conduct program reviews? The reasonability of program review is best determined through an examination of its goals. Consider four avowed goals, for example, that program review frequently claims. They are: (1) to eliminate program duplication, (2) to scrutinize programs thought to be underproductive, (3) to insure consistency between academic program goals and institutional mission, and (4) to determine the efficiency and effectiveness of academic program operations.

These are not uncommon goals. They bear some correspondence to those that describe the outcomes of the current doctoral program review being conducted in the State of New York. (Cf. Meeting the Needs of Doctoral Education, Position Paper 19 by the Regents of the University of the State of New York.)

One of the first questions that an evaluator might ask of PR is whether these are worthy goals. Are they obtainable, and are they deserving of pursuit in the first place? As we suggested earlier, the worth of social objects frequently depends on whom you ask. Why they believe so is a consideration in argument and persuasion over values.

From the state's view the value of PR may be argued to be that the state has a responsibility to monitor and improve educational services, and that, where necessary, this responsibility will entail strengthening some programs at the expense of others that are less worthy. It will mean establishing a process that is more useful than it is burdensome, a process that yields greater benefits to the social good than it incurs costs. These goals will also entail a cooperative relationship between institutional representatives and program review operators, lest an adversary proceeding be inadvertantly established. Insofar as PR is understood as an application of program evaluation, then we argue after Scriven (1974) that the cost of doing PR should not exceed the worth of the information that the process yields.

The rationale for program review needs to be stated clearly and examined publicly. If this is not accomplished, PR will possibly be construed by some as an effort on the part of the state to gain further control of postsecondary educational programs. Others will view PR as a way to place more effective and efficient controls on the utilization of educational resources. Some will see PR as the death knell of academic freedom and may argue that it is a process intended to standardize the higher educational curriculum and thus stifle creative alternatives and new approaches. Therefore, one of the first matters that needs to be considered is the rationale or argument that gives reasonability to the program review activity.

Whatever these arguments may be, whether about means or ends, it can be anticipated that there will be counterclaims and difficult questions that will be asked about the PR activity. If such questions arise in PR as they do during program evaluation, they will be questions like the following:

[1] How will program review discriminate reliably between duplications of programs when both programs appear to be excellent ones?

[2] How will productivity be defined, and how will the opportunity for innovation and potential failure be balanced against the productivity metaphor?

[3] How will program review avoid requiring educational homogeneity as a replacement for diversity?

[4] How will program review discriminate between educational efficiency and educational effectiveness?

Questions like these will more than likely be leveled at any statewide program review process. They deserve careful consideration before such programs are implemented.

(2) How realistic is it to conduct program reviews? If the activity of program review can be persuasively argued as a reasonable activity, the second consideration questions whether the activity is realistically intended. A realistic process for program review will require attention to three important aspects which are: [1] the determination of criteria, standards, and indicators, [2] operational definitions of critical constructs, and [3] the specifications of client, audience, and sponsored relationships.

If the program evaluation parallel holds true, the following terms will need definition: criteria, standards, and indicators. By criteria we mean the characteristics of programs that are believed to be important in producing a judgment of worth. Productivity, for example, might be judged to be one criterion for program worth. Standards, on the other hand, are the scales against which programs are compared with respect to a given criterion. Thus, if productivity were a criterion, a standard would identify the appropriate level of productivity that would discriminate among superior, acceptable, and unacceptable programs. Indicators are evidence that is believed, by somebody, to be representative of the criterion concerned. An indicator of productivity, for example, might be the ratio of degree recipients to the number of program enrollees. To complicate matters even further, most program evaluations, and we suspect the case will be similar for program review activities, employ criteria that require multiple indicators. Most program evaluations have severe technical problems when it comes to setting standards, and we expect that PR will face the same dilemmas whenever reviewers are asked, "How much is enough?"

Lastly, to these three concepts, criteria, standards, and indicators, we would couple credibility. Unless a program evaluation is believed by those who must respond to it, there is little likelihood of utilization. And, the degree of utilization is one indicator of whether an evaluation is successful. We believe that the same case will hold for program review activities.

Moving from the realm of evaluation per se, directly into the gut of the matter of program review, key criteria will require operational definition, since they will function as the decision nexus in all review activities whether these occur at the institutional or statewide level. These criteria include: duplication, productivity, consistency, and efficiency. In the act of definition, program reviewers will discover that these characteristics are not independent of each other, but quite to the contrary, they will appear intercorrelated in observations of program practice and effect. Thus, to believe that judgments on specific programs will be able to be made in fashions that deal with each of the criteria individually would be fool-hardy. The dependent criteria of program review will have to be seen as intercorrelated dimensions of program excellence.

The relationship between the criteria, standards, and indicators of a program (such as duplication and consistency) that will be the judgmental array of the review process will raise questions such as the following:

[1] What criteria of postsecondary educational programs will be used to judge the programs as worthy?

[2] Will these criteria be the same for programs at all levels of the educational structure?

[3] What levels of performance will separate duplicated from non-duplicated programs?

[4] What levels of performance will separate productive from non-productive programs?

[5] What levels of performance will separate the consistent from nonconsistent programs?

[6] What levels of performance will separate the efficient from the inefficient programs?

[7] In general, what inputs, activities, outputs, resources, and ratios will indicate nonduplicative, productive, consistent, and efficient programs?

Questions of this order will need to be investigated as part of the program review process or that effort will be doomed from its inception to a future of turmoil, political affrontery, and methodological ineptitude.

The third aspect of a realistic program review effort will entail the distinction evaluators made between clients, audiences, and sponsors. In this instance, when we speak of the client, we mean the person or group of persons for whom the program review process is intended to produce useful information. By audiences we mean those groups other than the client who have a stake in the program and who wish to share in the information that is generated because they believe the information and its possible effects on the program under review may have direct impact on their days. By a sponsor, we mean that person or group who carries the financial burden of supporting the costs of program review. Careful distinctions between client and audiences need to be made at the outset of program evaluations, and we have no doubt that similar distinctions will need to front the program review effort.

The consideration of clientship in evaluation and in program review focuses around the answer to the question, "Who is to decide?" This question becomes an important role separator, but more importantly, the locus of decision making becomes crucial when clients and audiences disagree about the decision. What happens, for example, when the local institutions and the state disagree about a program oriented decision? What will the decision rules be? What procedures for appeal, re-review, and due process will carry sway? Specifically, what will be done with programs that are judged deficient? Will they be given support for improvement? Eliminated altogether? What will be done with programs that are judged efficient and productive? Will they be expanded? Maintained at their present level of excellence? What will the decision rules be?

Consider the problem of decision rules more fully. There are multiple dimensions to program excellence, and there will be multiple decision rules. Consider, for example, the criteria of consistency, productivity, and

duplication. If we nest productivity under duplication and dichotomize each criterion, the decision grid suggested in Figure 1 is created.

Figure 3

Decision Categories Employing Three Dichotomous Criteria for Program Review

	Duplicate		Nonduplicate	
	Productive	Underproductive	Productive	Underproductive
	(1)	(2)	(3)	(4)
Consistent	Consistent Duplicate Productive	Consistent Duplicate Underproductive	Consistent Nonduplicate Productive	Consistent Nonduplicate Underproductive
	(5)	(6)	(7)	(8)
Inconsistent	Inconsistent Duplicate Productive	Inconsistent Duplicate Underproductive	Inconsistent Nonduplicate Productive	Inconsistent Nonduplicate Underproductive

Examination of the grid in Figure 3 suggests that in two out of eight cells there should be relatively little difficulty making a decision, beyond those complexities that describe political reality. Cells three and six, for example, should both signal clear directions for decision. We will want to maintain programs that are consistent, productive, and nonduplicative (3), and we will want to terminate programs that are inconsistent, duplicative, and underproductive (6). Or will we? Will there be other more important criteria? If we enter a further criterion called program quality, and if our program currently sitting in cell six showed extremely well on our program quality indicator, although the program was inconsistently excellent, duplicative, and underproductive, would we be equally quick to consider requiring its removal?

The Quandary of Multiple Decision Rules

To this point we have assumed that all criteria should have equal weight; that is, they should all be given equal importance in any decision. It would probably be more reasonable to consider weighting the criteria according to some preference function that will allow us to differentially maximize various outcomes. Consider what happens to our decision grid if we assign quality points to each of the three criteria according to some perceived relative importance, such that the sum of the quality points equals 100. For example, suppose that a state's budget analysts rank the criteria in order of importance: 1st, duplication; 2nd, productivity; 3rd consistency. And further, suppose

that these analysts feel that duplication is more critical than both the other criteria combined, and productivity is about twice as important as consistency. By allocating points according to this preference ranking, the following decisions would be made:

LET
Duplication = 51 pts.
Productivity = 35 pts.
Consistency = 14 pts.
TOTAL = 100 pts.
THEN,

Change or Drop	Keep	Cell No.
100	0	6
86	14	2
65	35	5
51	49	1
49	51	8
35	65	4
14	86	7
0	100	3

A similar pattern of decision would emerge in every instance where any single criterion was weighted more heavily than the other two combined.

However, if the three criteria were judged to be equally relevant, say by a particular institution, then some decisions would be reversed as in the following system:

LET
Duplication = 33 1/3 pts.
Productivity = 33 1/3 pts.
Consistency = 33 1/3 pts.
TOTAL = 100 pts.
THEN,

Change or Drop	Keep	Cell No.
100	0	6
66	33	2
66	33	5
66	33	8*
33	66	1*
33	66	4
33	66	7
0	100	3

According to the weightings given the various criteria, decisions about programs in cells (1) and (8) have been reversed. Moreover, the discrimination among programs has disappeared, since all cells except 1 and 6 are now scored evenly. A critical point to recognize is that, depending on the weightings of the criteria, any of the six cells which are not unanimously excellent or deficient could be maintained or abandoned. Program review will

need to determine how the weights will be set and by whom. Program review will have to determine whether the same set of weights should be applied to the criteria across all levels of program review and across all institutional types. State level personnel, for example, may argue for different weighting systems than will institutional representatives.

Dealing with Disagreement and Conflicting Values

Once the problem of weighting of criteria has been dealt with, another important set of decisions needs to be made. These decisions concern ways of dealing with disagreements or differences of opinion about the adequacy of program structures or even the reasonability of a decision to continue or terminate a program. Consider, for example, a two party comparison in which institutional program representatives are compared to state level program review representatives. The possible dimensions of agreement as suggested in Figure 4 represent the possibilities for one type of conflict that program review activities may have to confront.

Figure 4

The Dimensions of Agreement Between
Institutional and Program Review Representatives

		Institutional Representatives	
		YES	NO
State Level Program Review Representatives	YES	YY (1)	YN (2)
	NO	NY (3)	NN (4)

Evidently, in cells (1) and (4) there is little difficulty since both groups hold the same opinion on the program, although we should point out that the reasons that they hold this opinion (what we called earlier, the practical argument) may be substantially different. Be that as it may, they agree, theoretically, in cells one and four. However, in the off diagonal cells (3 and 2) there is opportunity for conflict and discussion. Decision rules need to be constructed to control the numbers of programs classified in two cells (2 and 3) since without these rules, program review activities risk becoming unrealistically expensive. If, for example, the state wishes to

certify and continue programs that the local institution may wish to abandon, modify, or drop, it becomes harder for institutions to control their own resources and preserve what they may rightly perceive as a sense of institutional autonomy. On the other hand, if the state attempts to drop programs which the local institution wants, the state may be in for a considerable professional entanglement.

If there were a basis from which we could set some prior estimates ("priors") on the probabilities that programs will fall within one of the four cells defined in the agreement matrix, we might be able to come a little closer to estimating the costs of statewide program review in postsecondary education. Consider the following example.

In the State of New York Regents Review of 126 doctoral programs in 10 disciplines, 70 (56 percent) were assessed as high quality programs, 29 (23 percent) as potentially high quality programs, and 27 (21 percent) were closed down or voluntarily withdrawn by the institution (Harrison, 1977). Using these probability estimates of the percentage of programs that will fit each of our cells in the little 2 by 2 table, we begin by estimating the percentage of programs that are likely to fall in the main diagonal cells (1 and 4). Let's assume further that the number of program decisions that fall in these cells are the number of programs that indicate an effective and efficient program review effort. This is true due to the fact that as the frequency of programs in the off-diagonal cells increases, the costs of program review, both of actual assessment and of political conflict, are predictably going to escalate rapidly. Ideally, place 95 (76 percent) of the program decisions in cell (1) and 10 (8 percent) in cell (4). Let us assume that the other two cells split differentially, such that there are about 4 times as many programs that the state wants to drop and the institution wants to keep as the other way around. We, then, develop the following estimator:

		Institutional Representatives (126 Programs)		
		Keep	Change or Drop	Total
State Level Program Review Representatives	Keep	95 (76%)	4 (3%)	99 (79%)
	Change or Drop	17 (13%)	10 (8%)	27 (21%)
	Total	112 (89%)	14 (11%)	126 (100%)

This outcome would mean that in the results of the New York doctoral program review cycle alluded to previously, 17 (63 percent) of the 27 programs that were directed to close would be the object of further review, discussion, argument, and data collection. In addition, another 3 percent or 3 to 4 out of 99 of the programs labelled "high quality" or "potentially high quality" would also be a source of disagreement. The establishment of procedures for statewide program review will gain from efforts developed to estimate the

minimal tolerances for decision agreement and program decision accuracy that are necessary for the system of program review to operate efficiently. Incidentially, the better a state system is, (i.e., the lower the total in cells 2, 3, 4), the less cost efficient PR will be. This is particularly true if every program must undergo detailed scrutiny and few programs are eliminated or made more efficient.

Justice, Certainty, and the Value of Information

Three important questions for policy formulation and the development of program review procedures are now suggested based on an examination of this agreement matrix. The questions are:

(1) Are the tradeoffs or conflicts that result (the off diagonal cells) worth the efficiency gained in eliminating mutually acknowledged poor programs (cell 4)?

(2) How much will it cost to get information which will produce fair and accurate judgments and decisions? For example, decisions to eliminate programs are much weightier than decisions to modify and improve programs. Thus, they need stronger evidence in order to minimize the probability of either a false positive (keeping a poor program) or a false negative (eliminating a good program) decision outcome.

(3) Stronger evidence means better information, both in quality and amount (multiple measures across multiple traits). Is the value of the decision to be made worth the cost of the information required in order to make that decision accurately and fairly?

In reality, the activity of statewide program review will likely involve not three but many criteria, and not two but multiple decision groups. Social realities are complex realities, and academic programs are social realities. People live there. In order to establish a just process for review, policies might usefully be established that protect the system against the worst types of decision errors that could occur. Described above, the errors most to be avoided are the inaccurate estimation of both excellent and poor programs. In the former case we risk harming an otherwise excellent program, and in the latter case we risk permitting an ineffective and resource draining program to continue to waste people's time and money. One way to guard against these outcomes is to load the decision boundaries so that the probability of these two errors is brought to a minimum.

For example, in the certification of commerical jet aircraft pilots, there are two decision errors that could lead to public tragedy or personal insult. One would be the appointment of an incompetent pilot and the other would be failure to appoint a competent pilot. In order to protect the public interest, confidence intervals can be constructed around decision bases so that the probability of making the first error, appointing an incompetent pilot, is 1/1,000 and the probability of making the second type of error is 10/1,000. The decision is loaded to protect the public good.

Such probabilistic safe guards against specific decision errors will provide one protection for program reviewers against the fallible evidence they will have to interpret. Beliefs in certainty passed long ago for most people

involved with social sciences, and the same is true for most program evaluators. We hope that program reviewers will approach their evidence with as much mistrust as do experienced program evaluators. To do anything else would be to risk turning program review into a rude empiricism and that would prove to be not only unprofessional but also methodologically inept.

Some Alternatives

Evaluations typically raise more questions than they answer, and lest we be convicted of similar effects in this paper, the following suggestions are offered as warnings about some predictable threats.

Operating from a posture of power, mandate, and public responsibility, statewide program review efforts may be justified, as evaluations directed at insuring external accountability within and across postsecondary programs in education. PR is a process designed to monitor, regulate, and judge worth. How these outcomes will be best achieved is a consideration in design, method, and tactics. It is to that set of concerns that we now turn in pursuit of useful things to do in order to implement program review in the best fashion possible.

Two Stages of PR: Old Data and the Marketplace

It is probably a truism that available data is a lot cheaper than new data. Thus it follows that anything program review can do to maximize its utilization of on-hand evidence will be a valuable cost-saving technique. For example, it may be that data already available at the state office level and from organizations such as NCHEMS and HEGIS may provide the basis for a primary level review that will permit programs to be sorted into several categories that will discriminate among programs according to their need for further study. A procedure not unlike this has already been articulated for the accreditation of colleges of teacher education by David Krathwohl (1978). As a result of a closer analysis of available data, additional evidence of either a self-reported or survey nature may only need to be collected from those programs that appear to require more study or where the reliability and validity of the on-hand data were subject to serious question. The second stage of PR would then be only for programs that were judged to stand in jeopardy at the end of Stage I. Actual site data and complete institutional self-studies would be required of such programs. Programs which were judged acceptable at the conclusion of a Stage I review would generally be left to the vicissitudes of the marketplace. This might be especially appropriate where two otherwise acceptable programs seem to be providing duplicate services. The market mechanism would encourage such programs to upgrade and diversify their offerings in an attempt to differentiate their programs from each other. Thus, the market could provide much the same stimulus to improve and/or winnow programs, without the cost of detailed PR.

The Value of Information and the Nature of Evidence

The spectrum of data possibilities is wide and spans the entire range of information gathering techniques described earlier. Tactics that range in scope from the traditional models of accreditation procedures (self-study followed by external expert judgments in a site visit model and a sequence

of panel reviews) to the arguments from budget studies and audits all present possible evidence to support the questions that will focus the program review effort. The guiding concern in all decisions about the collection of evidence should be the extent to which the costs incurred are justified in terms of the additional confidence or power such new data will add to a decision. Robert Stake's review of measures and techniques for estimating objectives, priorities, and other judgment data is a useful resource here (Stake, 1970).

There are also a number of vulnerabilities that confront program evaluators, and they are on the horizon for program reviewers. Some of the most obvious ones include the presence of multiple audiences and their potential impact on any program review proceeding. Insofar as program reviewers attempt to develop systems that will be responsive to the varying perspectives held by differing audiences, the costs of review are going to escalate. On the other hand, if these alternative perspectives on the worth of programs are not considered, program review risks ignoring blocs of people who possess considerable personal and political power. As the effort of individualized methods to meet the specific if not peculiar requirements of individual programs increases, the probability of there being a standard set of methods decreases. It may be because of considerations similar to this that the traditional portrait of program and institutional review processes represents an accreditation-like activity that is usually devoid of instructional outcome data and typified by the absence of stated standards and a heavy reliance on expert professional judgment and consensus.

Inexperienced program evaluators frequently have aspirations that are bigger than their budgets. Most clients have more questions than their budgets have monies to support the labyrinthine studies that are necessary to deal with the questions even at a descriptive level. A parallel case will exist for program reviewers if careful consideration is not given at the front end to the magnitude of costs involved in a system that will review all extant postsecondary programs within a state over a prespecified period of years. Given required visits and follow-ups, the costs entailed in such an undertaking in terms of staff time and budgetary commitment will be large. Thought should be given, consequently, to whether all programs need to be reviewed, and whether there might be a way to consider voluntary review with a few starter institutions as a means for pilot testing review procedures prior to statewide use.

Program evaluators with any experience will warn the neophyte that one of the irksome and time-consuming aspects of the practice deals with data management. The skills and person time required to set up and maintain usable and efficient processes for data retrieval and analysis are considerable, and they are frequently overlooked and underestimated. The enormity of the data base that will be rapidly developed in any statewide review process should warn program review directors ahead of time about the significance of the data management problems that await them. The management of this information, which is apt to develop wide appeal to individuals and agencies who had nothing to do with the collection of the information, will be one additional factor that could lead to an increase in a state's bureaucratic structure. In this case it will be a structure for program review, one that will house a goodly number of persons primarily responsible to establish, maintain, and update information inventories.

If the parallels to program evaluation work out as expected, program reviewers will also face the task of meshing multiple indicators of correlated criteria in order to inform a weighted judgment of program worth. This is no simple task. If done ineffectively or incredibly, program review will doubtless experience the costs of failure in addition to the cost of implementing the process.

The costs of such failure may be observed in areas only remotely related to the apparently risk free process of collecting information. The politics of program review and the possible effects it may have (from the alienation of college faculties to the weakening of educational over-sight functions) signal that people responsible for the design and articulation of program review activities are going to have to be people who are intimately acquainted with the power and the politics of postsecondary education in this country, particularly in their own states.

Program review presents a series of problems that are actually design considerations. Program evaluators spend a lot of time developing alternative arguments to deal with an unflinching reality called "what's out there," and it is reasonable to expect that program review directors should spend time in similar arguments. Research designs or evaluation designs, call them what you will, are best understood as a set of carefully calculated tradeoffs and appropriate justifications that are offered in defense of design decisions. Five of the tradeoffs that may confront program review are suggested in the following fanciful polarities:

Tradeoffs Confronting Program Review

1. Fidelity ---------- Bandwidth

2. Marginal Efficiency ---------- Cost of Reviews

3. Normative Comparison ---------- Criterion Comparison

4. Qualitative Emphases ---------- Quantitative Emphases

5. Internal Role ---------- External Role

These are fanciful dichotomies, but we present them in that fashion for the sake of brevity.

(1) Fidelity and Bandwidth. The difference between fidelity and bandwidth we owe to message design and communications engineering. Recently, however, Lee J. Cronbach (1970, 1978) has warned program evaluators of the impossibility of both maximizing specificity (fidelity) and generalizability (bandwidth) in the same measure or design. As we attempt to increase the clarity to fidelity of a signal, we diminish the range or bandwidth over which that signal can be carried or detected. For the activity of program review, reminders of the differences between bandwidth and fidelity symbolize the differences between attempting to develop highly specific, microscopic determinations of program effect and structure (fidelity) as compared to broad, descriptive

statements of program attainment (bandwidth) that allow the categorization of programs. As an exciting departure from the conventional wisdom of the accreditation model, program review directors should consider designs that permit both elements of high fidelity and others that maintain some bandwidth. Some postsecondary programs that have achieved distinguished records as successes or failures might be reviewed in depth in order to increase the fidelity of the claims that can be made about the program and to determine what makes them to be so.

(2) Marginal Efficiency and the Cost of Reviews. The relationship between marginal efficiencies and the cost of program review varies inversely according to the number of audiences served, the number of general and specific criteria employed, and the planning horizon used. That is, the gain in efficiency from eliminating one additional program will be minimized, perhaps even nullified, if PR addresses many audiences, uses multiple criteria, and plans only for the short term. This inverse relationship holds for the first two factors, many audiences and multiple criteria, because different audiences need different data and it simply costs more to collect additional data about a wide range of concerns. (This point relates to the previous discussion of fidelity and bandwidth, where a study which holds fidelity constant and increases bandwidth costs more.)

Establishing an appropriate planning horizon, however, involves what is now recognized in systems analysis as a classic tradeoff between efficiency and effectiveness. Thus, long range planning, say a planning horizon of 20 years, might dictate scaling-down, modification, or even increases in support of some programs which might be more efficiently closed in the short run. It is fundamental, then, for program review to be very clear about the costs of gathering data, the probability that major savings will be achieved, and the tradeoffs of short-term efficiency for total systems effectiveness.

(3) Normative Comparison and Criterion Comparison. According to the central limit theorem, all frequency distributions tend to approach the normal as the number of mean unit samples increases. Most program evaluations, and likely most program reviews, do not or will not possess enough units to capitalize on the known characteristics of the normal distribution. One problem with this type of argument is that we never really know the distributional characteristics of variables. Thus, we tend to assume that they are normal, when in fact they might better deserve a skewed shape. In fact, it is probably a credit to our postsecondary institutions that we can be comfortable with the assumption that the distribution of program merit is probably negatively skewed as suggested by the New York doctoral review data and in Figure 5 on the next page.

If the distribution of program quality is skewed as suggested in Figure 5, then approximately 21 percent of the programs would be rated as Low. On the other hand, if we begin by assuming that the distribution is standard normal, as depicted in Figure 6 on page 74, then the percent of programs that should be classified as Low quality under distribution (A) would be approximately 17 percent.

Unfortunately, what occurs in either situation, under this model, is that if we lop off the tail of the distribution that contains the low quality programs by putting those programs out of business, what program

Figure 5

Hypothetical Skewed Distribution of Program Quality

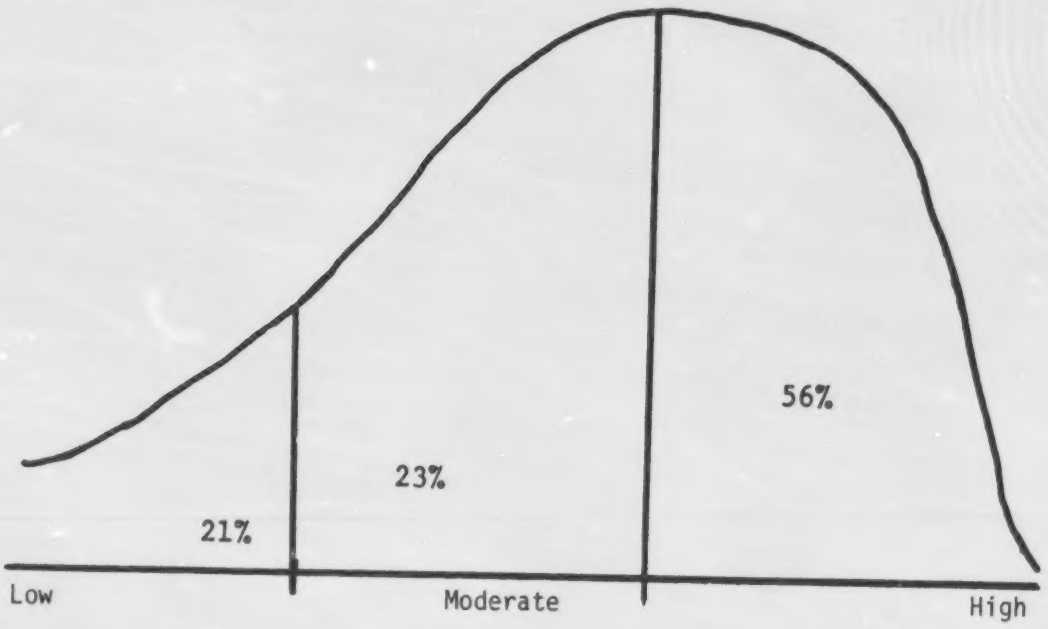
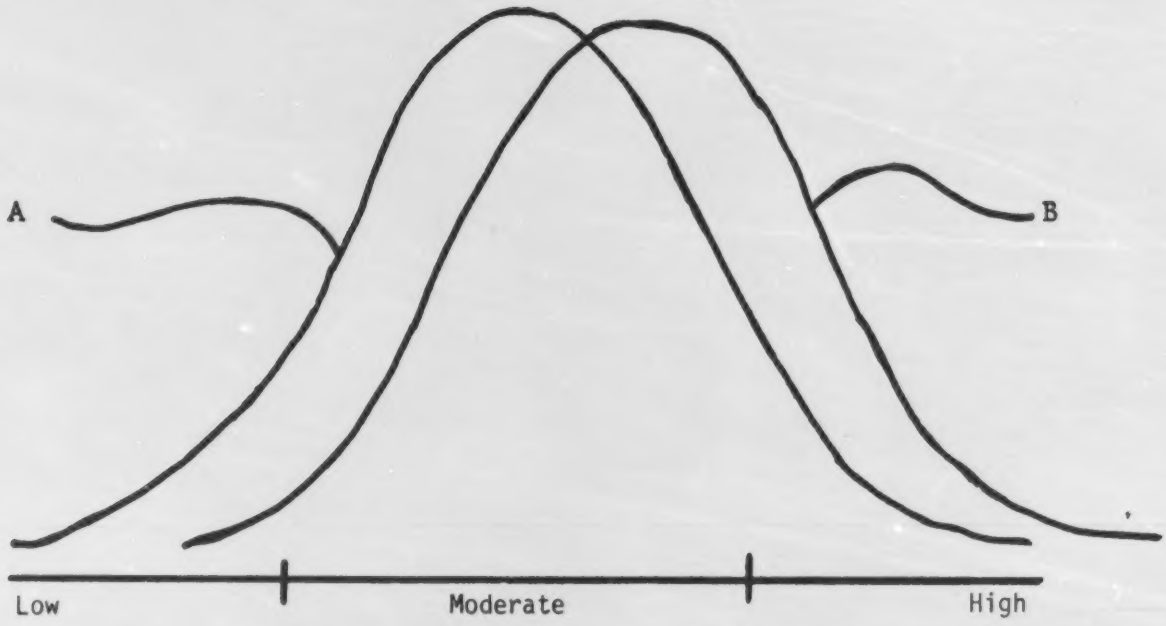


Figure 6

Hypothetical Standard Normal
Distribution of Program Quality



reviewers will have to be wary of is that the distribution will tend to reassume the same shape over repeated administrations of the program review effort (distribution B). This is not only a characteristic of the model; this is a primary characteristic of what has come to be called the norm-referenced model of testing and assessment.

Problems occur when we start using the distributional characteristics of the normal curve, such as the standard deviation, as the basis for determining the location of programs that should be dropped. As is evident from the differences between distributions A and B in Figure 4, cutting programs that fell in the left hand tail of the B distribution would mean the eradication of programs that actually were of moderate to good quality.

One way to circumvent this dilemma is to install a prestated, external standard of quality which is not free to vary and then to distribute programs around that standard. This is the kernel concept in criterion-referenced testing. The problem with this approach is that it is extremely expensive to locate the standard on empirical grounds. Thus, most standards, minimal competency cutting scores, and the classification systems that the activity of program review will develop for locating acceptable and unacceptable program performance are not empirically derived but judgmental. Such judgments are preeminently social artifacts. As such, they ought to vary over time with the changing premises of the social system that has created them and be responsive to the range of premises within the system at any given time. One of the delights and one of the technical perils of program review may be that it will use human judgment to gauge some programs. The stretch in this human ruler or standard hopefully will not be the result of measurement error so much as it will be a response to true change in social expectation and belief about the nature and presence of excellence. The ultimate premises of program review will have to stand or fall on the credibility of human judgment as supported in the opinions of expert and trusted others. The stretch of these expert opinions will be shown by the extent to which they are responsive to contextual as well as pervasive social differences.

(4) Qualitative Emphasis and Quantitative Emphasis. There is little to be said about the difference between qualitative and quantitative comparisions, because the truth of the matter is that all quantities are qualities (Kaplan, 1964). The entire debate that currently seems to have fractured the field of educational evaluation into warring camps of competing ideologues is little more than a difference of rhetoric and technique. There is no such thing as "hard" data any more than there is "soft" data. All we have to go on is empirical evidence, and the acceptability of that evidence varies most widely depending upon whom you ask or to whom you wish to be credible (cf. House, 1978). Program reviewers should seek credible evidence.

(5) Internal Role and External Role. Michael Scriven (1967) distinguished between the internal and external roles of the educational evaluator. Formative or helping evaluations are most often internal evaluations in that they are performed by people who are actively involved in the day-to-day operation or development of the program or product. As a result of this, their credibility to others outside the program is sometimes suspect. They frequently will have to bow to external evaluation when summative judgments are to be made on the overall program or parts of the program, especially one which they have spent

some part of their lifetime developing. External evaluators, while they frequently lack the bias that comes from extensive personal investment in a program, also risk the possibility of not being able to come to know a program intimately enough to support a fair, accurate, and credible judgment of its worth. As portrayed in the accreditation model, the processes of program review will utilize both internal and external evaluation. The internal evaluation will be represented by self-studies and reports of previous institutionally sponsored evidence. The external evaluation will be seen in the use of independent teams of outside experts, reviewers, and panels. This process seeks the congruence and discrepancy between the findings of the self-study and the informed opinions of outside experts.

Thus, as the activities of program review are designed, attention needs to be given to the tradeoffs between fidelity and bandwidth, efficiency and cost, normative and criterion referenced comparisons, quantitative and qualitative techniques, and internal versus external roles.

Is Worth-finding Worthwhile?: The Bottom-line on Program Review

It was appropriately asked of Plato, "Who shall guard the guardians?" And it is equally well to ask of program reviewers, "Who shall review the reviewers?" The question is typically raised in program evaluation spheres under the term, meta-evaluation. Its answer requires a description and definition of the criteria that ought to be used to judge the acceptability of a program review policy and process. In educational evaluation some good thinking has been completed on this matter by Daniel Stuffelbeam (N.D.), Michael Scriven (1969), and Lorrie Shepard (1977). Currently, a task force under the direction of Stufflebeam, based at Western Michigan University, is nearing completion of a set of standards for educational evaluation. These standards will give useful suggestions to program reviewers when they begin thinking about the meta-criteria that should dominate their processes. Without justification, we offer that the activity of program review will have to be accountable to questions about completeness, fairness, accuracy, and utility.

Based on arguments authorized by Ernest House (1978) we would suggest that the utility of program review, allowing argument from authority, will come politically to rest on persuasiveness. Program review will succeed in those contexts where there has been an effective communication of beliefs and value dispositions about the programs under study. This will mean carefully planned and conducted reviews that will require state and institutional personnel to expose, discuss, and defend the first principles of their programs and review processes. Failing this, both House's analysis and ours predict a failure in utilization, and consequently, a failure of practical argument.

This analysis has identified a number of issues that are related to program review policies and processes. They can be effectively summarized as questions.

(1) What criteria, standards, and indicators will be employed?

(2) Will the same criteria and the same standards be used to assess programs across universities, colleges, community colleges, proprietary programs, etc.?

(3) How will duplication, efficiency, productivity, and program quality be operationally defined?

(4) How will efficiency be related to effectiveness? For example, if programs are eliminated now, what is the possibility that they will have to be reinstated at some future time at much greater costs?

(5) What probability of error will statewide program reviews be willing to tolerate with respect to the possible elimination of a good program? Maintenance of a poor program?

(6) What will be the costs to the state required by central planning and the establishment of structures to support the massive data flow that statewide program review will create?

(7) How will program review handle the aggregation and analysis of data on multiple criteria?

(8) What are the important audiences that program review will have to address, and how are these audiences disposed toward the review policy and processes?

(9) What are the possible unintended effects of program review? To what extent, for example, may program review lead to a homogenization of postsecondary education?

(10) What will program review say to faculty, powerful alumni groups, and others who believe that they have been injured by the closing of a program under state requirement?

(11) What estimates have been developed for the costs of program review that will have to be covered by institutional budgets?

(12) What procedures will be installed to insure comparability of processes across sites, programs, and iterations?

(13) How will the question of meta-evaluation be resolved for statewide program review efforts? To whom will program review be accountable?

As in the process of program evaluation, answers to these thirteen questions will have to be justified within the frameworks of practical arguments, arguments which will inform the policies for program review. These arguments will contain the beliefs and judgments of people. Hopefully, they will be well-informed judgments and will constitute compelling arguments. Suggestions on how to cope with these and similar issues will probably surface from the initial forrays of the states into the program review effort. Other wisdom is available from state level and school personnel who have already experienced the review process in the K-12 sector, and these sources of policy data should not be overlooked.

Lastly, and most importantly, if there is a final caveat to be taken from evaluation practice, it is captured in the public recognition of the central role that human judgment will play in all that has been suggested. Judgment is our refuge in the absence of certitude. If we could be certain about the quality of an academic program, we would not need to rely on judgment. But it is our peculiarly human condition that forbids that and causes us equally to wonder at the frequent precision and reliability of those judgments. As most undergraduates will tell us if we ask, it doesn't take a Ph.D. to tell the difference between a good professor and a poor one, and we might add, between good and bad programs. The problem with judgments lies not in the making of them. The problem with judgments and thus with program reviews is getting people to believe them.

REFERENCES

Blackburn, R.T. and Lingenfelter, P.E. "Assessing Quality in Doctoral Programs: Criteria and Correlates of Excellence." Report for the Regents Commission on Doctoral Education, Albany, New York, September 1972.

Cronbach, L.J. Essentials of Psychological Testing. New York: Harper and Row, 1970.

Cronbach, L.J. Designing Educational Evaluations Stanford University, (Manuscript in preparation, 1978).

Dewey, J. "Theory of Valuation." In The Unified Encyclopedia of the Social Sciences. Chicago: University of Chicago Press, 1939.

Glass, G.V. The Growth of Evaluation Methodology. American Educational Research Association Monograph Series, No. 7, Chicago: Rand McNally, 1974.

Guttentag, M. and E.L. Struening. Handbook of Evaluation Research. Vol. 2, Beverly Hills: Sage Publications, 1975.

Harrison, D.G. The New York State Regents Doctoral Evaluation Project 1973-77, October 1977 (mimeo).

House, E. The Politics of Educational Innovation. Berkeley, California: McCutchan Publishing Corporation, 1974.

House, E. The Logic of Evaluative Argument. Monograph No. 8. The Center for the Study of Evaluation, University of California, Los Angeles, 1978.

Kaplan, A. The Conduct of Inquiry. San Francisco: Chandler, 1964.

Krathwohl, D. "An Accreditation Proposal." In Journal of Teacher Education, 1978, 29, 28-32.

Page, E.B. "Seeking a Measure of General Education Advancement: The Bentee." In Journal of Educational Measurement, 1972, 9, 33-43.

Regents of the State of New York. "Meeting the Needs of Doctoral Education." Position Paper 19 (no date).

Riker, W.H. and Ordeshook, P.C. An Introduction to Positive Political Theory. New Jersey: Prentice-Hall, 1973.

Scriven, M.S. "The Methodology of Evaluation." In AERA Monograph Series on Evaluation. Chicago: Rand McNally, 1967, 39-83.

Scriven, M.S. "An Introduction to Meta-Evaluation." Educational Product Report (February 1969), Vol. 2, No. 5, 36-38.

Scriven, M.S. "A Checklist for the Evaluation of Products, Producers, and Proposals." In W.J. Popham (ed.) Evaluation in Education. Berkeley, California: McCutchan, 1974.

Shepard, L.A. "A Checklist for Evaluating Large-Scale Assessment Programs." Paper 9 in Occasional Paper Series. Evaluation Center, College of Education, Western Michigan University, Kalamazoo, Michigan April 1977.

Stake, R.E. "The Countenance of Educational Evaluation." In Teachers College Record, 1967, 68, 523-540.

State, R.E. "Objectives, Priorities, and Other Judgment Data." Review of Educational Research, 1970, 40, 181-212.

Stufflebeam, D. "Evaluation as Enlightenment for Decision-Making." In W.H. Beatty (Ed.), Improving Educational Assessment and an Inventory of Measures of Affective Behavior. Washington, D.C.: Association for Supervision and Curriculum Development, NEA, 1969.

Stufflebeam, D.L., W.J. Foley, W.J. Gepart, E.G. Guba, R.L. Hammond, H.O. Merriman, and M. Provus. Educational Evaluation and Decision Making. Itasca, Illinois: F.E. Peacock Publishers, Inc., 1971.

Wildavsky, A. The Politics of the Budgetary Process. Boston: Little, Brown & Co., 1974.

Worthen, B.R. and J.R. Sanders (Eds.) Educational Evaluation: Theory and Practice. Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

Relating Role and Mission to Program Review

Mission, role, and scope planning and program review.

J. Kent Caruthers
Senior Associate
NCHEMS

RELATING ROLE AND MISSION TO PROGRAM REVIEW

J. Kent Caruthers

I approach the topic of how institutional role and mission relate to the program review process from the perspective of mission, role, and scope planning. Over the past two years, I have directed an NCHEMS project that examined mission, role, and scope development procedures used by both institutions and state postsecondary agencies. In that project, we have conducted ten case studies of various institution and state agency practices in defining institutional mission, role, and scope. From these case study experiences, we will be developing a procedures handbook during the next several months.

I also view the relationship between role and mission and program review from the somewhat broader perspective of strategic planning. NCHEMS is just embarking on a four-year Strategic Planning program of which the Mission, Role, and Scope Procedures project will be the first major link. We consider strategic planning to be an effort to identify viable matches between an institution's strengths and capacity and the demands and constraints placed on it by the external environment. As such, the strategic planning concept provides an umbrella under which NCHEMS will study mission, role, and scope procedures; program review; community needs assessment; enrollment planning and management; institutional environment assessment; academic outcomes; and a number of other related topics. Despite these many analytic components, I consider strategic planning--and especially program review and role and mission planning--to be primarily people-oriented processes.

Theoretical Relationship

Before moving to the results of our case studies, I believe it is important that we first consider the potential relationship between program review and institutional role and mission from a theoretical perspective. From this viewpoint, there should be a state of strong interdependency; each can, and should, build from and contribute to the other. In the best of worlds, this would be true for both institutions and state agencies. When an institution's mission is well established and understood, it creates a frame of reference for assessing program quality. For example, a college with an "open door" mission would not be nearly as concerned with traditional measures of the quality of its entering students as would a selective admissions college. Or, an institution with an urban focus may wish to place greater emphasis on the role of applied research and development than on basic research. This emphasis, of course, would be in sharp contrast to that of most of the more traditional major research universities.

When an institution's mission is ambiguous and needs to be re-evaluated, information--both objective and subjective--that comes from program review activities provides an effective statement of what the

institution actually is. For example, when an institutikon learns through program review that it is excellent in teaching and only average in research, it may well choose to accentuate the positive. Likewide, an institution whose program review results tell it that its science programs comprise its real strengths may determine that assuming a polytechnic mission is the best strategy for it to carve out its niche in the system of higher education.

For the relationship between program review and institutional role and mission to make a major difference, however, they must not only be strongly related to each other but also to the budgeting process. Only when these two processes individually and collectively can have influence on resource allocation is their full potential realized. Ideally, any new resources available to an institution should go to strengthen weak programs that have been determined to be essential to the accomplishment of the institution's mission. Or, for those institutions in less fortunate circumstances, budget cuts should be made at the expense of those programs that have been determined to be comparatively weak and non-essential to the institution's mission.

Actual Relationship at the Institutional Level

Moving from the theoretical to the real world, there is some evidence that program review and role and scope information have been used jointly at the institutional level in budgeting and priority setting. In preparing for its ten-year visit from a North Central Association Regional Accrediting team, Oklahoma State University measured its success in achieving its mission, reviewed the strengths of its many academic areas, and determined that a reallocation of financial resources was necessary (Robl, Karman and Boggs, 1976). This was done through a 1 percent across the board retrenchment and the selective strengthening of programs in those areas most essential to the accomplishment of its mission. Austin Peay State University linked an informal needs assessment effort with program review to identify a viable mission for itself in the coming decade. Importantly, it followed up by internally allocating resources to fulfill its new role. And Chattanooga State Technical Community College, which has the typical community college mission of serving its local area, uses needs assessment information to start up new programs and program review information to determine when programs can be terminated. They, too, are not reluctant to let financial resources follow program decisions.

The link among program review, role and mission, and budgeting is perhaps even more important when an institution faces a financial breakdown. The Albany University Center of the State University of New York relied heavily on its own internal program review results and a newly developed understanding of its role and mission to identify those program areas that could be eliminated when it was faced with a state imposed requirement to reduce its budget by nearly 10 percent in a single fiscal year (Shirley and Volkwein, 1978). Aquinas College, a four-year liberal arts institutions of approximately 1,000 students in Grant Rapids, Michigan, chose a somewhat different strategy (Hruby, 1973). After several rears of declining enrollment in the last 1960s,

it undertook a careful institution-wide program review to determine its strength and capacity. It found ways to change its mission to attract new students and to grow and prosper during a period when other institutions were falling by the wayside.

Unfortunately, examples are at least equally, and perhaps more, numerous of where an effective link among program review, role and mission, and budgeting has not been achieved. An all too common example is the program review activity carred out by a graduate faculty council which uses qualitative standards that far exceed any realistic aspiration of the institution's mission and resources. As a result, it never has much impact on the budgetary process or the future of the institution.

The reason for the failure to achieve a closer relationship at the institutional level among these three activities can be found through a closer examination of each. Most current statements of institutional mission, role, and scope are far too ambiguous to provide a useful context for evaluating academic programs and establishing budget priorities. We hope the fruits of the NCHEMS project will be a first step in resolving this situation. Also, the many conflicting demands that underlie most program review activities almost inevitably lead to less than useful results. We are just beginning to develop an understanding of the complexities surrounding institutional program review. Approaches to budgeting in colleges and universities also contribute to the sometimes distant relationship. This situation has become more critical in a period of increasingly inflexible resources. PPBS, Zero Base Budgeting and Performance Budgeting approaches have been developed in other organizational settings to respond to similar problems, but so far their transfer to higher education settings has usually been less than an unqualified success.

Relationship at the State Level

Generally speaking, there is even less of a link among program review, role and mission, and budgeting at the state level than at institutions. This is particularly true for the review of existing programs. While one can always hope for improvement, this failure to achieve an effective link may be at least partially explained by the limited role and authority of the state-level agency.

A common form of program review at the state level is the so-called lateral process. When using the lateral review approach, the state agency reviews all programs in the state in a particular discipline. The agency often invites a team of specialists from outside the state who are acknowledged leaders in the field to come and assess each program. It is this particular program review design at the state level that appears to prohibit an effective linking between program review results and institutional role and mission. The natural tendency for outside consultants who are looking at seemingly comparable programs at a number of institutions is to constrast one to the other. Although some lip service is usually given to considering how each individual program reinforces institutional mission, the overwhelming tendency is to rank order the programs against a common norm that is independent of their role in supporting the institution's basic purposes.

This isn't to suggest, however, that those state agencies with program review responsibilities should change their current approaches. Since the principal reason that many of these agencies are in the program review business is to eliminate costly and unnecessary program duplicaton, comparisons among programs seem inevitable. But the agency must remind itself that for program duplication to be unnecessary, the program cannot be essential to the achievement of the institution's mission.

The types of budgeting practices usually followed at the state level also limit the degree of linkage among program review, role and mission, and budgeting. As contrasted to institutional budgeting practice, state level budgeting is performed in highly aggregate terms and, in fact, about one-half the states use some type of budgeting formula for distribution of state resources to individual campuses. Given this budgeting practice, state officials have few opportunities to make the budget allocation a tool for correcting individual program deficiencies. Even though a greater linkage might be desired, its cost would surely be felt in terms of greater state level management of day-to-day institutional functions.

Despite the difficulties in achieving a strong link among program review, role and mission, and budgeting at the state level, a couple of examples come to mind where state level agencies have achieved some success in making these analytic tasks mutually re-enforcing.

For the past five to six years, the staff of the Florida Board of Regents, the governing body for the State University System, has set aside a small percentage of its total budget to be allocated outside the formula for special programmatic needs. The percentage set aside is small enough that it doesn't destroy the basic equity of fund distribution achieved by the formula, yet the pool of protected resources is large enough that programmatic change can be implemented. In particular, the State University System has established what it calls "programs of distinction." Each institution was encouraged to propose, for special funding, several program areas where it felt that it had a real opportunity to achieve national prominence. Their proposals were reviewed by various state level groups and, after several years, at least one program of distinction was created at each institution. As the institution made its nominations to the state board, and as that body made its selections, relevance to the institutional mission and program review information were the key factors in making a budgeting decision (Detweiler, 1975).

The Tennessee Higher Education Commission has conducted an interesting experiment in performance budgeting over the past several years first with grant support, and now with state dollars (Bogue and Troutt, 1978). In at least one regard, it should be similar to the Florida experience in that the Tennessee Commission also plans to set aside a small percentage of the total appropriation that is not to be distributed according to formula. Also as in Florida, each institution will have an opportunity to receive its share of the set-aside funds. But rather than create programs of distinction, the Tennessee Commission, which is a coordinating body, will allow each institution to set its own performance goals in areas of its own choosing, subject

only to the requirement that the specially designated areas be important to the state-approved institutional mission. Then, when the institution can demonstrate that it has met its performance objectives, the financial reward will be released.

A much clearer link between program review and role and mission can be observed at the state level in the approval of new degree programs. In almost every state, the proposal document which is filed prior to bebginning a new degree program requires that the institution demonstrate how the new program fits its current mission. But even here there is room for some improvement since many state-approved statements of institutional mission remain sufficiently ambiguous to allow an institution to justify almost any new program.

Toward Achieving a Stronger Link

The key problem that blocks achieving a stronger link among budgeting, program review, and role and mission is the relative underdevelopment of the state-of-the-art in each area. Even the advances that have been made during the past decade may not prove especially useful during the coming period of stability or decline.

Throughout most of the history of public financial support of higher education, colleges and universities have been in a period of growth--a fact that is reflected in the existing budgeting processes. Even in the occasional year when financial growth did not occur, the situation was viewed as a temporary inconvenience rather than as a signal for a basic realignment of the institution's mission. Also, most of the earlier periods of adjustment occurred when institutions were relatively small and it was possible to integrate the mission and program plans through the budget without the support of elaborate systems. The zero base budgeting system has been promised as a panacea for budget planners in this new, more complex, environment. But to date, there has been insufficient testing of ZBB in higher education settings to determine its utility.

Systematic program review is a fairly recent phenomenon in higher education, especially at the state level. As a result, we are just beginning to document the different ways in which program review might be conducted. And an understanding of the best matches between the various purposes for program review and the processes available is only beginning to emerge.

Institutional role and mission planning is an even less developed area. It is confused by the fact that on the one hand, institutions have had statements of role and mission since recording their original charters and publishing their first college catalogs. But on the other hand, few publicly supported institutions of any significant size have achieved a sense of mission that is shared by all members of its community and is explicit enough to serve as a guide for program review and budgeting. This situation, of course, led to the creation of the NCHEMS Mission, Role, and Scope Procedures project several years ago. After conducting the case studies and developing plans to write the handbook, we have collected our thoughts in these five areas:

- organizing for planning
- types of participation
- types of special analyses
- communicating progress and results, and
- maintaining a dynamic mission, role and scope identity

My closing comments will attempt to describe how current practice in each of these areas might be changed to achieve a stronger link with program review.

Under the area organizing for planning, we include such topics as determining an institution's readiness to plan, articulating the assumptions that underlie the effort, designing the particular planning process, identifying decision-making points, clarifying the objectives for the activity, and establishing a schedule. Aside from the general observation that getting ready to plan is time well spent in achieving the desired outcome, we have seen that most major examinations of an institution's mission, role, and scope have occurred in response to some strong external stimulus. In most cases, this has been the arrival of a new chief executive officer. But in other cases, it has been the resutl of a legislative mandate, a severe financial crisis, or preparation for a regional accrediting visit. The fact that most mission, role, and scope planning is approached as a one-shot effort appears to create difficulties in achieving a strong link with program review. Whereas program review activities occur on a fairly cyclical basis (perhaps annually), attention is focused on role and scope only once every five or ten years. As the length of time since the last role and scope effort increases, the extent of agreement about the mission diminishes and it becomes less valuable as a framework for program review.

In the area of types of participation in a mission, role, and scope development process, we have observed that the most successful experiences have relied on fairly wide scale involvement. Participants typically include those who are internal to the institution, such as students, faculty, staff, administrators, and members of the board, and to a lesser extent, those who are external. Types of participants in this latter category include consultants, members of the geographic community in which the institution is located, and educators from nearby institutions. We believe such broad involvement could also be important for achieving a strong link between role and mission and program review. As an institution or agency can achieve a greater degree of involvement by the same individuals in both processes, the understanding of institutional mission should have a greater influence as a program review criterion.

Special analytical studies also seem important for a successful mission, role, and scope planning effort. One such analysis that has been mentioned throughout this paper is academic program review. As we mentioned in the opening section, good program review information is

important in assessing what the role and scope of the institution actually is--as contrasted to what its mission says it should be. Other types of analytical efforts which we have observed to successfully contribute to the mission, role, and scope planning effort are variations of community needs assessment studies, community impact studies, demographic and enrollment projects, use of the Institutional Goals Inventory and campus environment scales, financial plans, and field trips to other similar institutions. Most of these analytical efforts might provide important input not only to mission, role, and scope planning efforts, but also to program review processes if they are carefully planned and coordinated.

Communicating a planned change in an institution's mission is a conflict-ridden endeavor. Individuals are able to compare their own educational and social philosophies with those of others. They learn of discussions that concern their status within the orgranization, and in some cases, even threaten their personal economic security. Probably no approach to communicating the results of any serious mission, role, and scope planning deliberations can avoid such conflicts. But we have observed that the unrest is minimized when there is open and frequent communication and the opportunity for a fair hearing of concerns. We have seen the effective use of special publications, public hearings in the community, and campuswide planning retreats in our case studies. We believe that this observation should also be of interest to those who coordinate program review activities. Further, we believe that the confidence in both mission, role and scope planning efforts and program review activities will be enhanced when members of the campus community can see that they reinforce each other in shaping the campus budget.

Maintaining a dynamic mission, role, and scope identity for an institution of higher education seems difficult to practice. While it is easy to sit at one's desk and draw flow charts showing how there can be feedback loops from shorter term planning processes to the longer term mission, role, and scope planning effort, in practice this is difficult to achieve. There appears to be no easy remedy to this situtation other than the simple advice to try harder. Areas of needed improvement include developing more explicit statements of institutional mission, role, and scope; preparing program review recommendations that suggest more specific remediation efforts, and constantly asking oneself if current decisions support or require modifications to the institution's mission. I don't imagine that many institutions will ever be totally effective in accomplishing these things. Deliberating on a college's mission, role, and scope is time-consuming business and time is becoming an increasingly precious commodity in this area of rapid change. Nonetheless, maintaining a clearer sense of vision of where the institution is and should be heading is so important that it demands whatever time is required from senior academic planners.

In closing, I would like to reiterate that I believe program review and mission, role, and scope planning can and should effectively support each other. Some institutions and agencies have already made considerable progress in this area. I hope the NCHEMS mission, role, and scope procedures handbook will be one tool that can help those who are less

advanced learn of such progress. Also, through workshops such as this, knowledge about the state-of-the-art in program review is rapidly spreading. This should help even the most advanced institutions and agencies to keep learning and improving. I believe their renewed efforts, and those of leaders in other institutions and agencies, toward achieving a closer, more practical, relation between role, and mission and program review will be well rewarded.

Levels of Program Review

Responsibilities for program review in state higher education coordinating and governing agencies, institutions, and system-wide offices.

STATE: William Chance
Deputy Coordinator
Washington Council for Postsecondary Education

INSTITUTION: Hugh Petrie
Associate Vice Chancellor for Academic Affairs
University of Illinois

SYSTEM: Anthony J. Moye
State University Dean
California State Universities and Colleges

STATE LEVEL PROGRAM REVIEW

William Chance

Washington first became involved in reviewing existing programs in 1971. In 1973 we completed the review of 135 graduate programs, and in 1977 we completed the review of 360 graduate programs in our state. We've reduced the inventory in the public institutions from 450 by about 93 or 94 programs.

In the review of both new and existing programs, I believe that state level reviewers can play a complementary role with respect to institutional reviewers. In general, at the state level we focus on qualitative considerations--need for the program, program cost, and institutional role--but we get a great deal of quantitative information to back these up.

I want to talk a bit about the four areas that represent the major areas of state level concern in my state. First is the quantitative/qualitative dimension. Our experience has shown that descriptive material on programs tends to be objective, or quantitative, in nature. Objective information is comparatively easy to assemble, while the subjective aspects of a program are much more difficult to convey. As a result of this we find ourselves dealing with what I call the quantitative/qualitative fallacy. It operates something like this: Since the reviewing agency emphasizes the quantitative aspects because they are objective, it accordingly deemphasizes qualitative aspects because they are subjective. Programs are thus not evaluated on the basis of quality, but on the basis of productivity. Therefore, a productive program of inferior quality will be continued while a high quality program with low productivity will be placed in jeopardy. The major problem with this contention is that it separates quantity and quality without recognizing that both are on the same dimension. I would not go so far as to say that quantitative indicators are qualitative by their nature, but there is a clear relationship between the two. A substantial part of the quality of a program can be demonstrated objectively. For example, publications in referred journals are posited as indicators of quality, but their frequency can be determined objectively. The number of faculty with terminal degrees, the size and diversity of facilities, the level of faculty research activity, the academic ability of students, the attitude of students and employers concerning the program--these are all indicators of quality objectively assessed. Other aspects such as unit costs, student credit hours, student faculty ratios, classroom hours, and productivity are also indicators of quality in that they measure effectiveness and efficiency. It has always struck me as ironic that the institutions criticize our agency for relying as heavily as we do on quantitative indicators, ignoring the fact that in institutions tenure decisions, promotion decisions, merit pay decisions are all based on quantitative considerations. If we can recognize that we are into matters of substance.

Washington has divided program need into three subcategories, some of which are pertinent to the state agency and others to the institution. The

three areas are student need, society and manpower need, and faculty-institution need. Student need is reflected in enrollments, admissions, applications, and graduations. Educational need is apparent in the necessity for offerings in one field to complement the offerings in another. This is an argument for offerings in a related field, though not necessarily for programs. A program in physics at the graduate level is not necessary to support a chemistry program, although graduate-level courses may be. Faculty or institutional need tends to be expressed in subjective terms--and the need itself also seems to reside mainly in that realm. Faculty need is described as the professional rewards faculty members obtain from working with graduate students, doing research at the graduate level, and external professional recognition gained from being involved in graduate programs in their field.

In assessing these four dimensions, there are some differences in the perspectives of institutions and state agencies. In general, our agency will focus on student and societal need requirements, as the data necessary to make judgments in these areas are often available from extra-institutional sources. The institutional initiatives can be effectively directed to the development of the case for faculty and institutional need. Information necessary to document these areas is found within the institution, although not usually in published form.

Related to cost is the overall interest we have in program efficiency and effectiveness. These two words, efficiency and effectiveness, have essentially the same root, but usage has created connotative differences that require some explanation. Efficiency describes the capacity of a program to operate with a minimum of effort, expense, or waste. Effectiveness relates to the ability to direct that efficiency toward a desired end--in our case, the education of students and areas of public and student need.

When we examine new and existing programs we direct a great deal of effort to determining cost. In Washington we now have an ongoing system of unit cost study. We know for each category of program in each major field what the cost allocation pattern is. We also managed to move from unit cost information--which is somewhat generalized--down to program specific information. As a result, we were able to go to the institutions with program specific cost information which could then be broken down into unit areas for comparison across institutions. Since we were using these cost figures solely for comparative purposes, we could have just as easily used widgets or nooks. Program A may involve 1.5 times the amount of resources as program B. We got into some difficulty at the end when people said, "Now that you have terminated all those programs, where are the dollars associated with them?" At that point we had to make a strong pitch for internal reallocations to support remaining programs at the institutions. We did that successfully, and in no case did the legislature cut institution budgets or demand payment of that money.

In our state our six-year plan includes institutional role statements. They are generally descriptive, but they still need greater precision. We have described our institutions in terms that, in general, accord with the

Carnegie classification; the University of Washington is classified as a Comprehensive Research Doctoral Granting University and Washington State University is a Comprehensive Land Grant Research Doctoral Granting University. One of the stronger institutional arguments we encounter is that a given program is necessary to the well-being of the institution. It cannot be a "Comprehensive Doctoral Granting University" if it doesn't have programs in this particular field. To deal with that problem, we took the ninety-one flagship institutions in the United States identified by the Carnegie Commission as Research I and Research II doctoral granting universities and, through a rather laborious process, looked at all their program offerings. We categorized them finally into 152 different graduate program areas, and we found that there was no single graduate program that appeared in the inventory of every one of these institutions. From that we deduced that there is not a single graduate program essential to an institution's status as a comprehensive university. There were some programs that showed up more frequently than others, however. We found that there were sixteen program areas in the graduate offerings at three-fourths or more of these institutions. We found another fifteen programs on the inventories of the next one-fourth, allowing us to conclude that thirty-one program areas were offered by more than half of these flagship institutions. We were really looking for core curriculum at the graduate level, although we ended by defining what it was not rather than what it was. The core curriculum question persists, particularly at the undergraduate level, and it is an important consideration for institutions. If they don't define the core curriculum at the undergraduate level--what it takes to be an adequate, responsive college or university--then I suspect that somebody's going to do it for them. It is a job that has been put off too long.

We have found that the presence of our agency within the state has taken a tremendous amount of pressure off the institutions and the legislature. A number of questions that used to occur every session are no longer being asked. The legislature doesn't criticize graduate education in Washington any longer, because they know that these programs have been reviewed by the Council. By the same token, when an institutional budget request comes in for a new program that has been recommended by the Council, it is invariably funded by the legislature without much question. Perhaps more significantly, in recommending a program we become advocates of that program before the legislature; we appear and testify in its behalf.

Our reviews have stimulated very effective internal reviews, if for no other reason than to preempt the state agency from doing them. We now have internal review procedures in all of the institutions; in two or three cases they are very good. As a requirement in our degree guidelines, we also insist that new programs be evaluated at the end of their fifth year of operation. As a result, institutions do not turn their attention away from a program once it has started. They know that at the end of five years the program will be reexamined and that it will be terminated if it hasn't measured up to its original expectations. The Council will terminate one such program next week.

Not only have reviews stimulated effective institutional level reviews, they have also stimulated more effective departmental level reviews. Departments now spend more time evaluating program structures and purposes, looking at departmental goals, and setting priorities among those goals than was ever the case before. The quality of programs has also been improved. We review approximately fifteen new program requests a year; ten years ago institutions were instituting four or five times that many. Very few programs survive the internal review process and get to the Council now because there's the feeling that the Council will reject an inferior program.

We have also improved the data base on which institutional decision makers make their judgments about programs. We now have in Washington a consistent format employed throughout the review process. After the department has a general approval from the state for one of its preliminary proposals, it can proceed immediately to collect appropriate data. Not only do the Council and Council staff have access to that data, but also the institutional decision makers.

I think we have improved inter-institutional communications. All new programs have to be reviewed by sister institutions. We have stimulated internal resource allocations by requiring evidence in new program proposals that internal reallocations have been considered.

Agencies such as the Council play a black hat role with respect to institutions, both in new and existing program review. We've often taken the heat off an institutional administrator by, in effect, putting the pressure on the institution to do something about a program. So he can say, "Look, I can't do anything about it . . . the state's pressing me." I do think that the institutions and the state live in a tension relationship, a dynamic balance, and I think that is desirable. The state agencies should not become advocates for the institutions any more than they should become advocates for the state legislature vis-a-vis the institutions. This tension relationship has had salutary effects in the state of Washington.

INSTITUTION LEVEL PROGRAM REVIEW

Hugh Petrie

I will give an institutional perspective, that of the University of Illinois at Urbana-Champaign, on the question of how state and system level review processes can promote and strengthen institutional practices of evaluation and review. What I would like to do is talk about two major areas. One is how, from my perspective, these processes vary by level, and second, what the results are by level.

First, it seems to me that institutional review either is, or at least ought to be, closer to a disciplinary or expert review than is the case at the state level. If there should be encouragement of effective institutional review, it would take that difference into account. The reason I say that is that one of the problems I have at the institutional level is the physicists, for example, telling me that only physicists can review physics. And there is a certain element of truth in that. It is not the whole truth, because it is not just physics, but physics as it is practiced and taught at the University of Illinois at Urbana-Champaign, and that involves a slightly larger audience. But it does seem to me that in one sense only physicists do know where physics is going, what the new directions should be. If you broaden this just a little bit, I think it is much less likely, for example, that on a state or system level reviewers would know what new academic directions to encourage or promote, which are not simply broad social concerns of whether we have enough doctors, or lawyers, or what have you. So, in terms of the interesting new academic directions that might result from institutional review, those tend to be discipline oriented, and, by and large, I do not think that the states and systems promote those perhaps as well as they should.

That is not surprising when you come to the second point, which is that a state is a sort of geopolitical entity and within that geopolitical entity are very different educational entities. Community colleges are much different from regional colleges and different from research institutions. So that when you ask for a state level review (and somehow or other that is connected with this geopolitical entity called the state), you are likely to get different kinds of questions asked than would be asked by the different educational institutions within the state, with their differing roles and missions.

Let me mention a few examples. What will be existing programs for a mature state university may well be new programs for a new institution. So if the state reviews new programs in one way and existing programs in a different way, the "same" program will receive a different kind of review in one set of institutions than it will in another. Consider another example, the problem of duplication. Even with outside experts, it is difficult to know whether a program in English in one institution duplicates a program in English in another institution. The expert

review is likely to focus on scholarly productivity and is unlikely to examine the possibility that an English program at the major research university might have quite a different function than the English program at the community colleges. Cost studies seem also to vary by the kind of institution being examined. We in Illinois, for example, end up with fairly low costs because as a major research institution we employ large numbers of teaching assistants. Other institutions have low costs because they employ part-time teachers. So again, the different kinds of institutions require that different kinds of questions be asked of them. Is it a "good thing" to have lower costs because you use large numbers of graduate student teaching assistants or because you use part-time instructors? From the state-level perspective, the low costs may be the predominant concern. For the individual institution, the reasons for the low costs may be of primary concern.

It seems to me that two things are absolutely crucial when you are speaking about evaluation. One, they are always being done for some purpose or other, and purposes vary for different audiences, for different regulatory agencies, for institutions. And secondly, evaluations are always basically qualitative, always made by the judgments of people who do that kind of activity well. If you want to call such people experts, all right: the crucial thing, then, is who the experts are for the particular purpose. The physicists are no doubt the experts for judging good physics. Who are the experts for judging how good the physics department is at Urbana-Champaign? Who are the experts for judging how much effort we should put into business education? Who are the experts for judging the instructional worth of different kinds of institutions? Once you realize that the peer groups with whom you ought to be comparing these people might be very different, then I think that the way in which you can strengthen institutional review on the state or the system level is to try to take account of that fact and not suggest that there is only one single purpose, one single peer group, one single mode or format for doing this kind of evaluation. I am sympathetic to the state and system level people because I get exactly these same criticisms from the different departments within the institution. I am told constantly that I do not recognize the differences and the uniqueness between the departments. And to some extent, that is true. And the response is, well, let us find the peer group for the evaluation that we are trying to do and consult that peer group.

Perhaps another way of making my point concerning the differences in program review at different levels is to note that what makes an evaluation credible varies from level to level. For the physicists, only physicists could make the process credible. State level people would want some "unbiased" judgment. After all, would physicists ever recommend doing away with physics departments? At the institutional level we have to be concerned that both state and faculty view us as credible.

Let me turn to the second general area that I wanted to spend just a little bit of time on, and that is, what do the results look like by level. One presupposition is that program evaluation will affect budgets. At Illinois we do not believe that we have had much, if any, direct effect on budget, but, in fact, there is a fairly significant amount of indirect effect on budget. You simply do confirm (or else contradict) certain beliefs held by the administration about the quality of programs; sometimes the budgetary implications can go either way. A strong program may or may not get budgetary help; a weak program may or may not get budgetary help. A lot will depend upon the judgment of whether or not the strong or weak program is central to the kind of university in question.

A second local effect has been that we have stimulated a number of preemptive strikes by the units being evaluated. When you know that you are coming up for evaluation, the indirect effects are simply enormous. We had a possible merger of two departments in the College of Agriculture in our mind and wanted to talk to the dean about it. By the time he got in to talk to us about it, he had already set up a committee to look into it thereby effectively precluding any direct recommendation from us. So, the problem of timeliness needs to be thought of in a fairly broad context, because timeliness not only refers to the fact that an evaluation is done, a recommendation issued, and a decision made, in that order. An evaluation may be very timely even if it has not taken place yet, because a good administrator will know that it is going to take place and use it in one way or another. I think we need to remember that when we are thinking about the effects of evaluations.

We have also had some effect on general academic good sense. Even at a relatively mature university like Illinois, there simply were departments before the first cycle of evaluation that behaved very badly and I think perhaps that they behave a little bit better now with regard to their faculty and students.

Just as the departments doubt that we at the campus level fully appreciate the unique contribution of each department, so, too, do we at the campus level have our doubts that those at the system level honestly recognize that whatever the prestige of the University of Illinois, it is due largely to Urbana-Champaign. We are not sure they fully appreciate that. But that is natural and to be expected. Everyone believes that his unique strengths are not appreciated and appropriately rewarded. Yet every higher level of organization has to make some comparative judgments, and if everyone really were unique, those judgments would be arbitrary.

With respect to results on a state level, I think what is happening is a bit clearer, but no more useful. We have what seems to be bottom line, incremental budgeting in the State of Illinois. There is a strong feeling for "across-the-boardism." If we are going to have 7 percent salary increases, everybody is going to get a 7 percent salary increase.

It does not look as if program review has made much difference in the state, with one possible exception, and that has to do with what are called New and Expanded Programs. It looks as if maybe this year for the first time there will be some money at the state level in that category. And it may be--depending on how you add up the numbers or how you categorize them--that the University of Illinois as a whole came out a little better in that area than some of the other institutions. It is hard to tell, in part, because, unlike Washington where they have been engaged in program review at the state level for a good long time, at Illinois we have been involved at it on an institutional level much longer than has the state. Only just this year are we finishing our first comprehensive statewide review of business education; the next six months will tell whether it has any effect. Fortunately, because of the way we approach it in Illinois, our institutional evaluations focus on the academic, educational kinds of purposes and these have a fairly direct beneficial effect on our programs. Since we have also been able to sell the state on believing that we have a credible process whose results can be accepted, we have not had the situation where we would have to rely on the state's efforts to see a program improvement benefit for our efforts. That may or may not change in the next year or so.

One final comment. We have had one statewide review of non-academic programs finished and one is in the process of being developed. A year or so ago the Equal Opportunity Programs across the state were reviewed--apparently with virtually no comparisons possible. As far as we could tell absolutely no results came of it all. The second one is the attempt to review on the statewide level research centers across Illinois. This one, again, bothers us with regard to the appropriate peer groups, because we have research centers whose appropriate peer groups vary from other national labs, all the way down to very local, regional kinds of research centers whose appropriate peer groups would be the local community utilizing the services that they render. And we are terribly concerned that we are going to have the whole bunch lumped together and somehow or other a simple-minded question asked: What is the return on the state's research dollar for these very disparate kinds of research activities? But fortunately, in planning for these non-academic reviews, the state agency is utilizing institutional input in the planning and design process, so we hope that maybe we will be able to convince them to diversify a bit. This is, in fact, my recommendation in these remarks: that states can positively affect institutional reviews by trying to diversify reviews through the use of appropriate peer groups.

SYSTEM LEVEL PROGRAM REVIEW

Anthony J. Moye

The California State University and Colleges System is a nineteen campus system. It is statewide, from San Diego to Humboldt (about 1,000 miles), has nineteen presidents and one Board of Trustees, no tuition, 300,000 students, more than 13,000 faculty positions, 16,000-17,000 faculty individuals. I think that you can see that program review has considerable consequences in a system of that size. Our aim at the systemwide level is to assist in making the program development process as realistic as possible and to assure that decisions made in this area are well informed.

In the California State University and Colleges System, we are involved in several levels of "program review." (It is important to note that by "program" I refer exclusively to degree programs rather than to options or concentrations.) These levels include:

1. Review and approval of new programs (academic master planning)

2. Review of program areas (statewide) to make policy recommendations regarding future curricular development

3. Review of existing programs (campus level)

4. Review of programs "identified" on some basis as likely candidates for elimination (system and campus)

Part of the problem we currently face is the question of the validity of the various approaches we utilize in program review. These processes have undergone close examination during the past year as part of the "fall-out" of the passage of Proposition 13 and the governor's additional one percent cut in budgets. It might be useful to read a sentence or two from the report of the Project Team on Academic Programs to give an idea of the issues that currently face systems and campuses in the program review area:

> "One of the consequences of the present level of uncertainty regarding budgetary support is the creation of a climate wherein programs and resources are managed on a crisis basis. That is, programs (and people!) are cut back or discontinued in terms of their vulnerability to fiscal necessity rather than than through careful planning."

Perhaps an even more important statement is:

> "In order for a planning process to have any reasonable chance of success, each campus and the system must have a reasonably stable basis on which to project levels of resource support."

This is currently a real problem in California.

Review and Approval of New Programs

A formal academic master planning process was inaugurated in 1963. The process involves a continuous five-year cycle, updated annually, which attempts to relate resources to degree programs projected. Thus a new program first appears as a project for future approval. Ultimately, new program proposals are submitted to our office for review and approval; no program may be started without our approval.

The policy base for this planning process is a comprehensive Board of Trustees statement originally approved in 1963 which is rather broadly stated. It leaves many policies open to interpretation by the staff. For example:

1. "Curricula are to reflect the needs of the student and the state."

2. "All colleges cannot be all things to all people." (Curricula in the applied fields and professions are therefore to be located in a systemwide pattern which will achieve an equitable and educationally sound distribution of programs throughout the state.)

3. Specialized, high cost programs are to be allocated on the basis of review and study of the individual subject areas. Other policy statements define foundation or "core" programs as basic to the offerings of all campuses.

Procedures for Planning Future Curriculum Development

Responsibility for implementing Trustee policy with respect to systemwide curricular development is delegated to the Chancellor. The campus Academic Master Plans are submitted annually by each campus to the Chancellor's office, where projections suggested by each campus are reviewed individually and in the context of the campus' total offerings and projections, the offerings of the system, and where applicable, the state. They are also reviewed in terms of campus resource capabilities. Following this annual review and updating, the plans are submitted, collectively, to the Board of Trustees. Trustee endorsement of all degree programs on the Academic Master Plan is required before projected programs can be submitted for approval.

Because the planning policies of the Board are quite general, they can be applied with whatever degree of flexibility external conditions require or individual situations warrant. In determining "needs of students and needs of the state," for example, there are obviously degrees of accomodation, and these are frequently dictated as much by overall public policy as by internal system policy.

It is important to note that program duplication, per se, is both natural and proper in a multi-campus statewide system of colleges and universities. Duplication is to a certain extent inherent in the definition of foundation programs for all campuses.

In summary, a formalized planning process, including rigorous review of all proposals for new programs, has been the practice at the systemwide level since at least 1963. Proposals forwarded by the campuses for review and approval have generally been subjected to extremely close scrutiny prior to their submission. Subsequent to the Chancellor's office review of programs, they are submitted to the California Postsecondary Education Commission for review and comment, but not approval.

A final note: Recent and anticipated budget stringencies place real limitations on the ability of campus faculty to respond to changing societal needs. It is likely that more and more often resources for new programs will have to be generated by discontinuing existing programs.

Only the near future will tell us whether the procedures developed sixteen years ago will continue to serve. That is, our academic planning process has been utilized during a period of growth; whether it will continue to work as enrollments decline is not yet clear.

Systemwide committees of faculty and administration are charged from time to time to study areas where program development is imminent in order to ensure orderly allocation of new programs. These studies lead to policy recommendations that will guide and limit program development. Draft reports and recommendations from these study groups are shared with campuses, the statewide academic senate, and other groups before being presented to the Trustees for approval. Recent studies have been done in the following fields: performing arts, industrial technology, business administration. Studies are planned in education, social work, engineering, and nursing.

Review of Existing Programs

In 1971, the CSUC Board of Trustees mandated that: "A formal review of existing curricula is to be conducted by each campus as a part of the overall planning process."

Since 1971, each of the 19 campuses has developed a set of procedures designed to review programs on a qualitative basis. Generally, each program is scheduled for review every five years, and approximately one-fifth of the campus programs are reviewed in any one year. A summary of the results of these reviews is provided to the Board of Trustees each November in connection with its review of updated campus academic master plans.

It is fair to say that campus program review procedures range from indifferent to excellent. Those processes that are most effective involve principal campus administrators on an ongoing basis, have institutional resources allocated to the process, and utilize the results of the review in arriving at resource allocations on campus. Since the reviews generally require extensive efforts by a large number of faculty, they are perceived as simply "busy work" unless there is a well-defined process for following up on the reports. For this reason, we intend to develop in the near future some minimum review guidelines and criteria at the system level to provide assurance that quality levels are being judged from a reasonably uniform perspective.

In addition to this formal program review process, each campus has developed an informal approach to review. This takes the form of an annual allocation or reallocation of resources to academic schools and departments (at the campus level). The resource allocation process, in effect, carries with it an implied program review. When overall resources are increasing, the relation of resource allocation to program review is much less apparent than it is when allocations must be reduced.

The question facing each campus is how to inform the allocation process with more than statistical data. Specifically, how are individual campus and system goals relating to student access and program quality to be incorporated into the research allocation process at each campus? Is there an identifiable point at which decisions need to be made about retaining programs which can no longer be supported or about acceptable levels of quality? Is there a way of deciding within the resource allocation process whether certain programs should be discontinued? The most obvious way of dealing with these questions is through combining the resource allocation process with the program review process, either in its current form or in an alternate form specifically designed to relate program review findings to resource allocation questions.

The relation of mission and goal statements to program review is so obvious it has not been stated here. In the context of the Academic Program Project Team report referred to earlier, we have asked each of our campuses that have not already done so to develop specific mission and goal statements.

Discontinuation of Existing Programs

Although the central office is ambivalent about playing too extensive a role in the review of existing programs (i.e., it should be largely a campus responsibility, albeit not exclusively so), the collegial nature of campus governance is such that there is often a need for outside assistance in arriving at decisions to discontinue existing programs. In general, the less threatening the "regular" program review process is, the more effective it is likely to be in maintaining or enhancing quality. Therefore, in addition to and congruent with ongoing program review, we ask campuses to review (and defend) programs that have been identified as low productivity areas. Identification is made on a quantitative basis--number of degrees produced, student faculty ratios by level, number of courses and sections offered per term, number of low enrollment courses, etc. Programs so identified require "extraordinary justification" in order to continue. To date, our efforts in this area involve "persuading" a campus that it is in its best interest to terminate programs not fully justified. Three or four programs are terminated each year on this basis. Clearly, we need to do much more in this area in order to be fully effective. However, we feel that a low key approach is more likely to produce a spirit of cooperation from campus faculty.

Conclusions

The entire thrust of our program review efforts at all levels is to assure that program decisions made are both (1) as informed as possible, and (2) as rational as possible under the prevailing circumstances. Judgments must be made; they should be made well.

A major problem with review efforts in a period of declining resources is their tendency to foster a spirit of negativity and hopelessness among the faculty. I believe that at the system level we need to take great pains to continually reinforce the positive aspects of review and not discourage responsiveness to new needs, innovation, and creativity. We need to find some way of providing incentives to those who perform well.

Additionally, at the system level, we must find ways to reinforce and support campus administrators and faculty who make difficult, often impossible, decisions. For example, when a president decides to terminate or severely curtail large programs of indifferent quality in order to provide resources to start new programs, and, in the process, gets attacked by students, faculty, and legislators, we must assist in assuring that fair processes were followed in arriving at the decision. In higher education, it is often easier to make "no decision," i.e., pro-rata cutbacks, a little everywhere. This approach is destructive of institutional integrity in the long run. In the short term, it undermines the intent and credibility of the program review process.

Finally, though I believe our process is orderly and structured and informed by data, I would hardly characterize it as "scientific." Rather, in the political environment in which we find ourselves, I believe that we in the California State University and Colleges System can justify our program decisions on a rational basis.

Improving Program Review Through an Effective Information System

The importance of data in program review.

Roger Bassett
Director
State Level Information Base Project
NCHEMS

Brenda Helton
Coordinator for Planning
Kentucky Council on Higher Education

Norman Charles
Higher Education Specialist
California Postsecondary Education Commission

Robert Rhodes
Academic Coordinator
New Mexico Board of Educational Finance

STATE-LEVEL INFORMATION BASE PROJECT

Roger Bassett

NCHEMS has been involved in the State-Level Information Base Project for four years, thanks to the support of the Kellogg Foundation, which provided us with a four-year grant of approximately a half million dollars to study the kinds of information required to support higher education planning. About a year into the project, the National Center for Education Statistics also joined. They had a number of interests related to the state-level information system design function, including the obvious question of how federal data collection is related to the information gathering and reporting activities of state agencies. They were also interested in developing planning functions descriptive enough that each of us who stand to be affected by federal policies and federal grants could begin to make more sense out of them and to have a greater input into how those decisions are made. Consequently, the NCES grant has included an activity called the Federal Data Core Project. I am not going to spend time on that this morning, but you will be hearing more about that from NCHEMS. It is an effort on our part to help the federal government, particularly the education function of the federal government, take a look at its planning responsibilities and the kinds of information necessary to support them. What we have come up with in the State-Level Information Base Project is a set of planning guidelines for people involved in either evaluating or designing state-level information systems. We make a distinction between data and information, and further, between a data base approach to the maintenance of data and information and the one-time data collection activities of the sort we have been talking about these last few days. We are not attempting to prescribe data collection of any kind, but merely to guide the kind of planning process used to make those decisions for yourself. But especially we're not trying to get into the business of applications of specific kinds of information, as is typical of requests for approval of new programs, and we're not trying to get into a kind of comprehensive description of all possible information involved in state-level planning either. Primarily we'll look at the organized data base aspect of all this.

There were eight pilot test states involved in the project. Some of them are represented in this room, but I want to mention them because we put a great deal of emphasis on sharing the experiences of those pilot test states, both in the documents that are forthcoming and through activities we have developed which would actually make it possible for you to be in touch with people in those eight states. These eight states are in a very real sense the resources from which we've drawn, and we hope others will be able to draw from them: California, Hawaii, Illinois, Kentucky, New Jersey, South Carolina, Virginia, and New York. There were also a couple of states involved--Idaho, which was looking just at the information suggested for state-level planning in the area of adult and continuing education; and Nebraska which was involved in the adult continuing education. Rhode Island and Hawaii are the states that were really attempting to develop ways of using outcomes information at the state level as part of planning.

Throughout SLIB we have maintained a heavy emphasis on the uses of information; I guess, in a nutshell, our advice to people is: if you don't need the information, don't collect it. That is greatly oversimplified, of

course, because there is a very real need to anticipate information requirements as agency planning responsibilities develop. But there is the sense that a state agency should justify its data base in terms of its responsibilities. Within that spirit we looked at the major responsibilities of state planning, the three main ones are: (1) comprehensive planning, which includes enrollment planning and mission, role, and scope planning; (2) budget review; since, some state agencies actually participate in the development of budget requests and the allocation of appropriate funds; and finally (3) program review. It is possible, obviously, to argue that program review is a part of comprehensive planning, but as this workshop demonstrates, it is a distinct enough activity with enough resources being invested in it that it deserves to be treated separately.

With that kind of background, within the context of this workshop we would like to explore with you the program review practices of three state agencies--California, New Mexico, and Kentucky--and how those involved use information in their activities.

KENTUCKY

Brenda Helton

If one reviews the minutes of the Council on Higher Education, it becomes readily apparent that graduate programs and program review have been an issue in the State of Kentucky since the early 1970's. Since 1971, the Council has used several different approaches in graduate program review, before finally attempting internal staff review. Let me briefly review for you the history of graduate program review in our state.

The first action in this regard was taken in 1971 when a moratorium was placed on any new graduate and professional programs except under mitigating circumstances. In 1973, the Council directed its staff to meet with the graduate deans and discuss an approach to graduate program study. The subsequent study committee recommended employment of consultants. The consultant who was retained recommended the formation of a task group which later became one of several in an overall comprehensive planning effort. This task group was composed of a representative from each of the eight institutions. They had a difficult time in addressing anything but the overall issues of graduate programs and, therefore, made no recommendations on particular programs. In 1976, the Executive Director of the Council appointed a consultant panel of four to conduct a qualitative review of doctoral programs only. This review involved only two institutions in this state. As a result of the consultant panel's recommendation that a specific role and mission for each institution should be developed before program review was continued, the Council staff was directed to write the University Mission Statements. The most important aspect of these mission statements was the discussion of a system of higher education composed of various parts each with a differentiated function. This was the first time that the Council had publicly confirmed that each institution was not to be comprehensive in nature. The political situation at the time, along with the Council's judgment that the statements not be inflexible, resulted in rather broad statements. The strategy was to make the statements more detailed and specific through program review. Thus, an institutional statement which stated that selected master's degree programs should be offered would become more differentiated when the master's programs were registered. Yet, this flexibility did not preclude new program proposals compatible with mission limitations. After the adoption of these mission statements, the staff conducted an internal review of doctoral programs with the mission statements as the primary focus. The staff recommendations were presented to the Council in May and all but one Ph.D. program has been acted upon by the Council.

In the midst of all this activity, other changes were taking place in Kentucky which had a direct bearing on program review efforts, and in fact, set the stage for the approval of staff recommendations on doctoral programs. The Council adopted a definition of degree program in 1976 which was directed towards uniformity. This definition has allowed the

staff to compile an inventory of degree programs from the way institutions choose to describe their degree program offerings. The Council also adopted in 1977 the registry of degree programs. To be placed on the registry, programs must be approved by the Council and, if not on the registry, programs are not considered for funding, or for planning purposes. In July 1977, by Executive Memorandum of the Governor, the Council was given additional program authority at all degree levels and other responsibilities which strengthened certain of the Council's statutory powers.

I have reviewed this chronology of events not to show that the Kentucky Council on Higher Education has foundered in trying several different approaches to program review at the graduate level, but to indicate the very sensitive political climate in which program review and planning take place. The institutional representative approach to program review failed to work because the representatives were reluctant to approach a statewide review and divorce themselves from their own institution's future program offerings. Secondly, until certain Council responsibilities were put into precise statutory language, the institutions had been fairly successful in lobbying in their own behalf. As an example of the factors involved which are not solely educational, let me describe the situation as it related to the doctoral program review.

The two institutions in Kentucky which offer doctoral programs, University of Kentucky and University of Louisville, are by statute recognized as the principal statewide university and a major university in an urban setting. The University of Louisville came into the Kentucky system in 1970 and is located in the most populous area of the state with the largest legislative delegation. Both institutions have professional programs in Law, Dentistry, and Medicine, as well as Medical Centers which vie for state funds. In addition, since the University of Louisville had joined the state system, it had shown rapid growth and had received substantial state funding not only for reduction in its tuition but also for capital construction. In many discussions after the adoption of the mission statements, it became clear that we had two doctoral institutions, one with comprehensive offerings and one seeking to be comprehensive in its offerings. Since one institution was in a more populous area and had a larger legislative delegation, the staff's recommendation had to be soundly based on educational practices, statewide concerns, and unnecessary duplication while recognizing the sensitive political environments.

The staff's preliminary work began with the development of an overview paper which described graduate education in an historical, national, and state perspective. This paper was primarily developed for our lay Council, but it also described the review process and the dimensions of program review. At the same time, the staff wrote summary reports of four to five pages in length on each of the 64 doctoral programs at the two institutions, 51 programs at UK and 13 at UL. These summary reports were intended to be an objective description of the programs as presented by the institutions in their program report submissions

to the Council. The summary reports each had the same format: program description, student data, faculty data, need assessment, and summary or analysis. Next, the staff developed four criteria in priority order upon which our recommendations were based. These criteria were based on sound educational principles and did not consider politics.

The first criterion is the state's need for the program either in terms of manpower needs, research needs, or public service needs. The second criterion is the relationship of the program to the institution's mission. The third criterion is adequate student demand for the program based upon an average of two doctoral degrees conferred over the five-year reporting period. The fourth criterion is evidence of quality considerations, i.e., resources to support the program. As a result of the prioritization of these criteria, programs which did not meet the first criterion were no longer considered. Many programs met the first two criteria, but did not evidence adequate student demand.

Programs which met all four criteria were recommended for registration, 29 at UK and 1 at UL. Programs which met the first two criteria but did not meet the demand criterion were registered with comment, 18 at UK and 7 at UL. This category was developed because the staff felt the criteria should be adhered to and that it would be a disservice to programs which unconditionally met all the criteria to aggregate them with programs which did not. Secondly, this category put the institutions on notice that these underproductive programs would probably be reviewed more critically in the next review cycle.

The Council on Higher Education began developing its Management Information System in 1974. Early in 1975, the National Center for Higher Education Management Systems initiated a State-Level Information Base Project with funding from the W.K. Kellogg Foundation. Kentucky was selected as one of the five pilot test states to assist in the development and testing of the SLIB concepts. The SLIB effort helped Kentucky to define its needs in the planning area and begin to structure the Management Information System so that data could be fed into the system, validated, and utilized in various combinations.

The major use of the Council's management information system and data base during the doctoral program review was not as intensive as utilized during the master's program review.

However, we did utilize the system to verify enrollment and degrees conferred data. We also used cost study data in the doctoral program review and have already utilized it to a greater extent in the master's program review. We also made use of state manpower projections from another state agency. We have had discussions with that agency asking them to specify degree levels in their projections.

The master's program review is ongoing and we expect recommendations to be presented to the Council in the fall of 1979. The baccalaureate program review is progressing and is much more data intensive than either

the master's or the doctoral program review. A summary sheet of pertinent information on each baccalaureate program has been coded and is currently computer retrievable.

The review activities have also resulted in changes in our data base. As a result of program review and other ongoing Council activities, the data base has been greatly expanded. This is one of the advantages of the SLIB project.

The SLIB approach allows for expansion of the data base without causing any delay in the use of the existing base. It is very flexible and can be expanded by definition of the new item. This, of course, saves much time and effort on the part of the programming staff and gives rather quick response to the user groups.

One problem we have encountered is the fact that as items are added to the base the demand for information has exceeded expectations. Therefore, it's difficult to keep pace with the planned development of the base and satisfy the users who require information from the base.

While most of the information utilized by this agency is computerized, there are certain areas of information which we have maintained on microfiche and other retrievable media.

One additional action taken by the agency was to establish the Kentucky Center for Educational Statistics which is designated by statute as the repository for higher education information. Our thought there was to avoid having several sources which could provide conflicting data and create credibility problems.

CALIFORNIA

Norman Charles

One condition that is important when we're talking about any of our activities in California is the sheer size of the enterprise. We have, as you may know, 106 community colleges, 19 campuses of the State University, nine campuses of the University of California, along with several hundred private degree-granting school and colleges. This tends to complicate things enormously.

Each system office is responsible for the approval or disapproval of new programs, and each each of these central offices maintains an extensive data base for its own system. In the case of new program proposals, therefore, a proposal is reviewed at the Commission only after it has made its way through a series of review procedures starting at the campus level. We seldom deal directly with the campuses.

We have developed a form for proposing new programs from each segment, based on a standard set of criteria. These are criteria we all use. In fact, it seems to me that if someone would come up with new criteria for program review, it would cause the same stir among us as the discovery of a new element among physicists. Nevertheless, I will mention a few of the standard criteria and try to suggest how we use them.

Criteria for Program Review

The essential document in any state for program review is an updated inventory of what programs exist. It took several years' effort, but we now have an inventory program in California colleges and universities that is computerized so that it can be conveniently updated annually. We have a 15-page index, double columned, which is invaluable, and is the first thing we refer to whenever a new program is proposed. This year we have distributed the inventory not only to the campuses which responded, but also to high school counselors.

An important criteria we use is student demand. Recently we did a computer printout of enrollments in each major program on each campus at all levels for the past five years. That will also be added to annually so that we will be able to see exactly what is happening in a comprehensive way. I find it to be extraordinarily useful as one indicator of student demand. I should point out that I'm speaking of only what we have "in-house," so to speak. We also expect to get the college's judgment in each of these categories. In the case of student demand, of course, there are other enrollment trends over a period of time, and it is often difficult to indicate exactly how many students a college might expect to enroll. I've never trusted the approach that distributes a questionnaire to people in a related field, asking, "How many of you would sign up for

this major if we offered it?" Obviously, the use of all these categories calls for judgment.

Manpower information is, of course, another central category of documentation, particularly with two-year programs or programs with a specific occupational focus. However, we are a long way from making a science of projecting manpower needs. Although it is a criterion that requires extreme care in interpretation, one responsibility of a planning and coordinating agency is to try to see to it that the number of persons trained in a field and the number who can be employed remain in some balance. That will never be worked out perfectly, of course, but we have come to feel that for a new Ph.D. program there has to be some evidence that a new batch of graduates can be absorbed, particularly in cases where there are other programs in the state in the same fields available to students.

Another criterion we use is the total cost of the program. We have not done a thorough cost of instruction study as yet, although I believe we are under direction to begin doing them. Instead, we have asked for individual proposals to provide projections of the number of new faculty which will be required or what facilities and equipment might be needed. I think all of us are aware of the possible misuses of a cost of instruction study that would lead us to charge more for certain degrees than others. I've actually heard it suggested, only half facetiously, that we might begin to base tuition and fees on the major a student chooses. I can imagine a college advertising a special on sociology programs for next year at $398.00. But that's an extreme misuse of that sort of information.

We have listed a category in regard to both new and existing programs which has to do with the maintenance and improvement of quality. Our approach here has had to be that we foster and encourage programs of the highest quality, and yet that we have left that determination to the campuses and to segmental administrative offices. There are times, of course, when one certainly feels tempted to comment on a proposal in these terms, but we try to refrain from doing that.

The advancement of knowledge is another criteria for consideration. There may be no data evidences for this criteria. Here we have in mind those programs and fields--such as energy or certain areas of medicine--where there are no other programs, we've never enrolled in the field, and do not have any evidence of what the job market is. And yet, it seems to us that the program area ought to be encouraged. Obviously, we have to rely on the stature of the faculty proposing a program to ensure that it is a field that is legitimate and useful.

I just want to say, in conclusion, that in the process of program review at all levels we need all the information we can obtain. There is no amount of information, however, that will eliminate the subjective judgment invoved in each decision. We seldom get proposals that allow for easy decision--in other words, high cost programs with no student demand and no job market and seven programs already in the state. If we did, there would be no challenge.

NEW MEXICO

Robert Rhodes

Introduction

At the request of the New Mexico Legislature, the Board of Educational Finance, in cooperation with the Academic Council on Higher Education (which is composed of the chief academic officers of New Mexico institutions of higher learning) conducted program evaluations in New Mexico's six institutions of higher education. No special funds were appropriated in support of this study; each institution, in cooperation with the staff of the Board of Educational Finance, undertook this review as part of the regular operation of the institution.

Significant changes in the nature of the American society make it imperative that academic programs be systematically examined to determine if graduates are, in fact, being trained to meet the needs of this changing society. No single institution can satisfy all these new needs. More than ever there is a necessity for matching resources to these growing expectations.

This study was undertaken as the first step in a systemwide approach to academic program reviews that will hopefully allow more thoughtful planning and more rational setting of institutional priorities. The following institutions are included in the scope of this study:

University of New Mexico
New Mexico State University
New Mexico Highlands University
Western New Mexico University
Eastern New Mexico University
New Mexico Institute of Mining and Technology

A review of academic programs on a statewide basis offers the opportunity for more effective coordination of all programs, but the achievement of this coordination is directly dependent upon the establishment of an ongoing process of interinstitutional program monitoring. This study should be seen as merely a first step in this ongoing review process.

The specific charge of the legislature to examine the question of program duplication led to this comprehensive review of all academic programs in order to determine if some unjustifiable programs exist in New Mexico's institutions of higher education.

The first year's study revealed that there were many programs being offered that required careful examination to determine if those programs should be continued. The study also revealed that a certain amount of program duplication is both necessary and desirable. Accessibility of college education and the availability of well-rounded undergraduate programs are factors which must be considered when assessing the justification of duplicative programs.

A recent report on long-range educational objectives identifies significant aspects of changing conditions which universities face in the next decade:

- Slow enrollment growth to 1980 and stabilized enrollment thereafter;
- Stringency of financial resources for higher education and for the universities at both state and federal levels;
- A reduced number of academic career positions for recipients of doctoral degrees, combined with continued demand for doctoral and professional-degree graduates in other types of careers; and
- Continuing changes in student interest and in social trends, giving rise to new needs toward which the universities' resources for teaching and research might better be directed.

Program Review Procedures

In order to identify possible deletions in program offerings at the six institutions of higher education, the following steps were taken:

- Development of a fact sheet for every program at every level in each university.
- Development of criteria for identifying programs that should be subjected to closer scrutiny.
- Development of a precise procedure for identifying programs that should be dropped.
- Development of a complete and accurate inventory of degree programs.
- Development of an ongoing procedure to produce accurate data on program enrollment, graduates, and costs.
- Visitation by the Academic Council of each institution and presentation by the institution of actions taken concerning programs identified by the American Council for review.

Schedule for Program Evaluation Study

June
- Reviewed proposed design of study with Academic Council.
- Reviewed study design with Legislative Finance Committee.
- Reviewed present approval procedures with graduate deans.
- Completed on-site consultations with university personnel.

July
- BEF staff completed detailed degree program inventory "fact sheets"
- Academic Council Meeting:
  --Progress reports on mission and role study
  --Distribution/discussion of degree program fact sheets
  --Reached consensus on preliminary criteria for evaluation of existing programs

- Data collection and identification of selected criteria.
- Institutions validated fact sheets corrections by July 30.
- BEF staff refined criteria for evaluation by testing criteria against fact sheets.

August
- Completed data collection and applied selected criteria.
- Incorporated missing and/or corrected data on to fact sheets.
- Final application of refined criteria set to validated fact sheets in order to develop lists of questionable programs.

October - Academic Council reviewed flagged programs and institutional representatives presented initial reactions. Format of present report agreed upon.

December - Report delivered to Legislative Finance Committee.

Selected Criteria

Criterion One--Number of graduates by degree level from each program in last five years:

Baccalaureate level programs having four or less graduates per year on the average over the last five years.

Master's level programs having three or less graduates per year on the average over the last five years.

Specialist level programs having three or less graduates per year on the average over the last five years.

Doctoral level programs having two or less graduates per year on the average over the last five years.

Criterion Two--Average of head count students enrolled in Fall 1974 and Fall 1975:

Baccalaureate level programs having 12 or less majors per year on the average over the last two reporting periods.

Master's level programs having nine or less majors per year on the average over the last two reporting periods.

Specialist level programs having nine or less majors per year on the average over the last two reporting periods.

Doctoral level programs having six or less majors per year on the average over the last two reporting periods.

Progress on Programs Reviewed

Progress to date shows 141 programs failing Academic Council criteria. Action has been taken on 119 programs: 71 have been dropped or combined; 27 are still under study; and 21 are to be continued.

STUDY OF ACADEMIC PROGRAM REVIEW

Introduction

This report is the result of a joint study conducted by Lilla Engdahl for the Western Interstate Commission for Higher Education (WICHE) and Robert Barak, working as a consultant for the National Center for Higher Education Management Systems (NCHEMS). It was undertaken as a result of a growing interest on the part of both sponsoring organizations, the higher education community, and certain governmental bodies in the evaluation of academic/occupational programs. The study's purpose was to develop an overview of the current status of academic/occupational program review in colleges, universities, system offices, and state higher education coordinating and governing agencies. The study focused on program review activities both within institutions and at the state level. This report is based on survey responses from state agencies in the western states which are included under the WICHE Compact: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The results of a national study on the same subject will be published separately by the National Center for Higher Education Management Systems.

The report includes a general discussion and a report of the survey results. The general section includes a review of pertinent literature, a state-of-the-art description of program review activities, and an analysis of the major issues related to program review. The report of survey results provides an analysis of responses to the survey; it includes a section devoted to institutional responses and a section summarizing the approaches taken to program review by each of the thirteen western state agencies.

The published literature on program review/approval is very limited. The authors are aware of no general studies of the area other than the present effort. There are a few general works on academic program evaluation (Dressel, 1972, 1976; Cranton and Legge, 1978; Heydinger, 1977); and numerous works on either evaluation in general or curriculum development, which in part may touch on academic program review/approval (Wood and Davis, 1978). The elusive topic of "quality" has been a frequent subject of the literature. Several notable attempts have been made to develop ways of assessing quality as an important aspect of graduate program review (Clark, 1976, 1977; Blackburn and Lingenfelter, 1973; Kelly, 1976; Grodsky, 1979). Other studies have concentrated on program review at the departmental level (Clark, 1977 and 1979; Smythe, et al., 1978). There have also been several relevant conference presentations on designing and implementing program review (Mims, 1978) and the need for program review (Heydinger, 1978). Only one paper has concentrated on procedures for program approval of new programs at the institutional level (Gilmour and Lee). One-well done unpublished paper presents a model for review and abandonment of programs (Gilmour, et al., 1977).

External program review, perhaps because of its more controversial nature, has been the subject of a number of recent inquiries. General studies of extra-institutional program review (Rudnick, 1976) and state-level coordinating/governing agency program review (Barak, 1976, 1977; Barak and Berdahl, 1978) provide a rather comprehensive report on the status of these external reviews. Two other studies concentrate on legislative program evaluation efforts (Petersen, et al., 1977; Berdahl, 1977). Program discontinuance is the subject of a current study by a graduate student (Melchiori, ongoing) and a brief recent survey of state-level program discontinuance was undertaken by another graduate student (Skubal, 1979). These latter two studies complement another recent major study on program discontinuance (Dougherty, 1979).

Program review and approval are of increasing significance to institutions, system level offices, and state postsecondary education coordinating and governing agencies. The reason for this significance is the well-known pattern of events characterizing higher education today:

- increasing costs combined with a loss of support money as a result of inflation and recession;
- reduction in financial support from private foundations and federal agencies;
- diminishing employment opportunities for persons holding advanced degrees;
- an increased emphasis on accountability;
- the general trend of declines in enrollments and in college-going rates.

Most state-level higher education coordinating agencies have been involved in program review and approval since about 1970, although some were involved much earlier. Prior to 1970 coordinating agencies often had statutory authority to review and approve new programs, but in the last decade statutory responsibility for the review of existing programs has often been added to their duties, either directly or through budgetary action by the state legislatures. Some state agencies which have no statutory authority have conducted reviews of existing and proposed programs as a coordinating responsibility. In either case, the formal review of graduate programs is more common than that of undergraduate programs.

Program review and approval are conducted for many different purposes; however, most of them can be grouped under the general term "management tool." At the state level, program review and approval are oriented toward improved coordination and planning. At the institutional level they are focused on "program improvement." Even where financial exigency provides the initial impetus for program review, institutions emphasize the ways in which the elimination of weak programs can enable them to concentrate their resources in other areas.

The term "program" is defined variously by institutions and state agencies, and "program" and "curriculum" are often used interchangeably. However, the most common definition of program is a series of courses arranged in a scope and sequence leading to a degree or certificate. In some institutions and states this includes majors or fields of specialization.

The following section provides a description of procedures used in program review conducted at three levels. It is divided into general discussions of: (1) institutional program review procedures; (2) state-level program review procedures; and (3) program approval procedures involving both the state and institutional levels.

Institutional Program Review. Institutional procedures for program review vary about as frequently as there are institutions conducting reviews. Consequently, the description of the procedures which follows is of necessity both a simplification and a generalization of the procedures actually utilized by colleges and universities.

At the institutional level, primary responsibility for program review rests with either the graduate dean (primarily at research universities) or the vice president/dean/provost. A slight variation to this general pattern is in the two-year community colleges where the dean for vocational/occupational education may be responsible.

A common method of scheduling program review is to rotate programs on a cycle of 4-7 years (5 years seems to be the average). Program review is often scheduled to coincide with accreditation visits. Other situations can trigger a review of a program, e.g., a poor accreditation report, drop in enrollment, or a change in leadership at either the departmental or dean level. One small private institution reported that a review of programs occurred whenever there was a faculty or administrative staff vacancy.

The first step in the review process, once a program has been identified for review, is a departmental/unit self-study based upon general guidelines provided to all departments/units being reviewed. Some self-study guidelines are more specific than others, but most include a statistical profile of the department or unit, typically including enrollment statistics, credit hours taught, faculty vitae, budget information, and student admissions data.

A second common feature of institutional reviews is the establishment of a review committee. The composition of the review committees varies widely, but frequently includes outside peer consultants, faculty outside the unit, and appropriate administrators. Some community colleges use their existing advisory committees for each program; however, there are mixed reactions to using the advisory committees in this way. Outside peer consultants seem to be one of the most highly regarded sources of evaluation of the program being reviewed, but most persons interviewed agreed that they are expensive (average about $500 per program) and that it is difficult to select an "objective" team of consultants.

The next step is generally an institutional committee which first reviews both the self-study report and the consultants' report and then makes a recommendation to the appropriate administrative body. The uses of these reports vary widely, from storing them on a shelf to incorporating them into the institution's planning and budgeting cycle. An interesting method of the latter is the "memorandum of understanding" used by Ohio State University and the University of Vermont. This approach sets forth the fiscal and planning implications of the review process (Arns, 1979).

State Agency Review. State higher education agencies which conduct program reviews cite several purposes for their reviews:

- maintenance of articulation and coordination among the parts of a complex system of postsecondary education;
- facilitation of planning for postsecondary education in the state;
- elimination of unnecessary spending caused by program duplication;
- assurance that available resources are adequate for quality education;
- identification of programs which do not meet minimum criteria as a basis for decision to eliminate or strengthen them.

In the state of Washington, selected program data are reviewed annually by agency staff, usually the academic program, finance and research/information officers. Those programs which do not meet previously established minimum standards are identified for intensive review. Institutions are notified which programs will be evaluated and are asked to provide specific data about them to the state agency. In addition, each program is reviewed on an established five-year cycle. In both cases, the institutions provide data, including:

- program cost;
- faculty workload;
- class sizes;
- evidences of quality;
- state/national production data in the program;
- dollars saved and quality improvements to be achieved from program consolidation or termination;
- student interest;
- societal needs in terms of state, regional, and national needs;

- manpower demand and placement;
- additional dollars needed to establish a quality program;
- harmony with the institutional role;
- institutional information.

The state agency may decide to investigate other aspects as it feels necessary. State agency staff reports to the state board or commission usually include both a summary report of the program review and recommendations for board action. Typically, the state board has authority to make decisions, but in Washington the state agency delivers the report to the institutional board in the form of a recommendation for action. The actions which may be recommended are: a continuation of the program as it is presently offered; continuation with stated conditions; consolidation with other programs; probation; termination; or further review.

In this kind of program review, institutions provide data and information to the state agency, but have limited direct involvement with the state staff.

State Agency Program Review with Institutional Participation. State agencies which have statutory authority for program review often involve institutions to varying degrees in their procedures. In Idaho and New Mexico, for example, institutional staff work closely with the state staff in designing and implementing the review procedures, while in California and Oregon state agencies limit their involvement to monitoring the procedures carried out by the major statewide sectors and/or institutions. This monitoring consists of examining the procedures in light of the statewide master plans to insure the adequacy of resources and also to insure that attention is given to both program quality and statewide public interests.

In addition to the participation of institutional staff on statewide review committees, institutions also conduct self-studies. Often review committees, like those described above in the institutional review procedures, are established to oversee the institutional program review.

Programs are selected for review on a rotating cycle, by minimum criteria jointly established by the state agency and institutions, or at the request of either the state or institutions. Generally, a two-stage procedure is followed. First, institutional data are examined to determine if programs meet the established minimums. Information typically includes:

- the number of students enrolled in each of the past three to five years, and the current year;
- the average number of graduates for each of the past three to five years, and the current year;
- the changes in gross total of graduates.

Secondly, the institution conducts a study of programs not meeting minimum criteria, using either routinely compiled data and/or extensive ad hoc surveys of students, employers, administrators, and faculty. The statewide committee uses the self-study report to formulate recommendations to the state board for action on the reviewed programs.

Outside peer consultants are used in some states in the second phase as advisors to the statewide review committee and the state board.

Survey respondents reported the following decisions as possible in the review of existing programs: terminate; continue "as is"; continue with modification; continue with strengthening; probation; or restudy after stated interval. For proposed programs, the options are to: implement; deny approval; review at a later date; or rewrite and submit again.

Issues Related to Review of Academic/Vocational Programs

Review of academic/vocational programs is a highly sensitive activity. Perhaps it is the most controversial task that institutions and state higher education agencies undertake, for it involves questions about the effect of state agency authority on institutional autonomy; conflicting purposes of its use both to reduce cost and to improve quality; and the relation between program review and external evaluation. The following discussion briefly examines these and other issues identified through the course of this study.

An important issue in program review is that of maintaining a proper balance between state authority and institutional autonomy. While institutional administrators generally accept state agency responsibility to collect data from the institution, they are often concerned about the authority of the state in other aspects of review. In particular, state agency review of courses is viewed as endangering institutional autonomy. Many faculty feel that external examination of either course content or teaching techniques is a threat to their independence.

On the other hand, state agency staff are often frustrated in their coordination efforts, especially by institutions' arguments that the elimination of a specific program will not in fact reduce costs.

The solution--a difficult one--is to establish accepted limits to both institutional autonomy and state agency authority. Leon McCarrey, Deputy Commissioner of the Utah Board of Regents, relates that a coordinating plan for all post-high school curricula was put into effect in that state in order to avoid unnecessary duplication. The coordination created a different role for each of Utah's institutions and resulted in a division of labor among them. McCarrey argues that, "State higher education must be viewed in a broader context than can be seen by a single institution and the associated board" (McCarrey, p. 87, 1968). He believes that academic departments at an institution should decide the structure and content of a program or curriculum within the established role of the institution. The central state agency should judge how the program relates to those of other institutions in the state, its impact on other programs, and whether better alternatives exist.

Another activity related to the question of autonomy is the legislative program audit. Conducted by committees composed of legislators or by legislative staff, these versions of program review are viewed with apprehension by institutions. The chief criticism is that persons from governmental positions not only lack an understanding of higher education but also that they tend to make political decisions. Although legislatures in twenty-nine states have established post-audit oversight committees, very few legislative audits have actually been conducted. As long as state agency and institutional program reviews meet the needs of legislatures, there is expected to be little activity by legislative bodies themselves.

Often the purpose of program review is at issue: Should it be used to reduce costs or to improve quality? Obviously, the purposes for conducting reviews determine not only the methods used but also the outcomes.

Fiscal constraints, mandated by voters in California, Idaho, and other states and by legislatures in Colorado, Utah, and Nevada, have heightened interest in the use of program review as a management tool for resource allocation at both the state and institutional level. In the past, when faced with state cutbacks in funds, institutional administrators have in many cases simply made cuts "across the board" in all programs. This technique is unquestionably quick and noncontroversial in the short run; however, over a long period of time it is likely to be costly. Donald Smith, Senior Vice President of Academic Affairs for the University of Wisconsin System, voiced his concern that this response would "weaken the fabric of the university as a whole" (Smith, 1975) over the years. He urged that program review be developed as part of institutional long-range planning rather than as a reaction to a financial crisis.

Both state agency and institutional administrators surveyed in this study cautioned that program reviews should not be expected to result in cost savings. Experiences in Louisiana, New York, Utah, and other states indicate that cost savings do not necessarily result from program review and termination. For one thing, the first programs terminated as a result of reviews in those states tended to be those with low productivity, thus, those already requiring few institutional resources. Savings are more likely to result from a drop in student enrollment accompanied by a decreased need for faculty and equipment.

In any case, the issue in cost savings is basically whether the institutions will retain the use of any funds saved or whether the state will keep the money. While this question is often seen as another disagreement between states and institutions, it is not as simple as that. In response to our survey, state staff showed a clear awareness that, although program reviews could help with immediate decisions about where to make budget cuts, over the long run reviews should serve instead to reallocate funds in order to help institutions strengthen needed programs and terminate weak ones.

Selection of criteria is one of the most critical aspects of program review; obviously, it is closely related to the purposes for which the

review is being undertaken. The criteria to be used and the weights for each criterion should be agreed upon jointly by all participants at both institutions and state agencies. Making this decision early in the planning stage helps avoid later conflict and dissatisfaction. Moreover, application of previously adopted criteria helps assure equitable evaluations for all programs being reviewed.

An overemphasis on quantitative data ignores achievement of program objectives, geographic availability of, and need for programs as well as other nonquantifiable data. Programs with different purposes should obviously not be evaluated by the same criteria.

Study participants expressed concern about the need to establish criteria for the assessment of the quality as well as the productivity of programs. Information for evaluating quality includes ratings of degree programs by experts in the field, by deans and faculty outside the institution, or by professional association officers. Peer ratings are considered by Barak and Berdahl (1978) to be the only consistently reliable measure of quality. Mary Jo Clark's study at ETS (1979), however, identified environmental and operational indicators which are also useful in assessing program quality.

Russo et al. (1977) expressed concern about the use of quantitative data in making decisions to terminate programs:

> Head counts, credit hours, full-time equivalents, time to graduation, drop-out rates, dollar cost per degree, volumes in the library, and student/teacher ratios are relatively easy to compute. Number numbness is what W. David Maxwell (1973) labels the phenomenon. The criteria used for judging "goodness" are selected because they can be counted . . . .

One problem, according to the Washington Council for Postsecondary Education, is that such criticisms tend to separate quantity and quality without recognizing that they may represent two ways of expressing the same factor. They contend that much of the quality of a program can in fact be demonstrated quantitatively. For example, indicators of quality which can be quantitatively assessed include the frequency with which faculty publish in refereed journals; the number of faculty with terminal degrees; size and diversity of facilities; level of faculty research activity; academic ability of students; attitudes of students and potential employers toward a program. Measurements of effectiveness and efficiency, such as unit costs, student credit hours, student/faculty ratios, classroom contact hours, and degree productivity are also considered by the Washington Council to be indicators of quality (WCPE, 1977).

No single schedule for the review of programs can be described as typical. Continuous reviews (or reviews which recur too often) place a great burden on institutional staff, but continuous review is the only way problems in programs can be detected soon enough to be addressed effectively. Periodic reviews may allow years to pass before problems

become evident. Most institutions and states have adopted a flexible approach which includes an established cycle in which each program is automatically reviewed at certain intervals and, in addition, includes criteria which will automatically identify programs for an unscheduled review. Some agencies and institutions are searching for ways to select programs for review which are not in trouble because of low productivity but which may need strengthening for other reasons, such as relatively high enrollments and unmet demands.

Selection of participants is critical to the success and acceptance of program review. State agency staff are often perceived by institutions as outsiders who lack institutional experience and understanding, while state agency staff believe institutional reviewers lack objectivity. Institutional staff charge that the state personnel's lack of academic experience and their remoteness from the campus weaken their understanding of academic concerns. However, training programs for state staff, such as that developed by the Education Commission of the States, are attempting to meet the need for knowledgeable people with both the experience and analytical skills necessary to understand the complexities of statewide coordination.

Within institutions program review activities are often resented because they are interpreted as an effort to justify reduction of support for individual programs. Faculty involvement in review is very important. Orientation and in-service training in evaluation methodology for faculty and staff in institutions can help to improve understanding and participation. The support staff should also be represented in the procedures and informed about results, since the termination of specific programs has an impact on the need for library holdings and for other services, such as student support. Both state staff and institutional administrators reported in the study that the time used to build cooperation and trust among participants is a worthwhile investment.

Outside consultants are used by fewer than half the state agencies surveyed in the study; only two states in the West routinely use out-of-state consultants. Cost seems to be a major deterrent in their use, although program reviews within institutions tend to include them fairly often, particularly in the review of graduate programs.

Selecting consultants is a difficult task. Early in the design of the program review procedures, the selection process and standards for consultants should be agreed upon both by institutional and state staff. One question in the use of consultants is the cost compared to the value received from consultant review; other areas of controversy--such as the availability of consultant reports to all parties--can be eliminated through planning.

The primary criticism of data collection at the state level comes from institutions. Their concern is that data needs are not identified far enough in advance to permit accurate and complete collection. For

the most part, data must be collected at the institution; this effort can be made easier if routinely collected institutional data are used in program review. Unanticipated requests for data impose additional work on faculty and research staff. Another data problem is the inconsistency of definitions; data provided by different institutions are not always comparable. For use in statewide reviews of programs at several institutions, it is obviously important that statistics reflect the same information.

Another issue in the use of data is the fear that quantitative data will be used without considering unique differences among institutions and without considering qualitative information. Moreover, observers fear that an overemphasis on productivity will result in a dilution of quality if institutions respond by adopting lower admission standards and easier grading practices to improve numerical productivity. The National Board on Graduate Education has expressed concern over application of simplistic statistics, especially in decisions to terminate programs.

A major issue related to the approval of proposed new programs is the question of when the state agency should be informed that a new program is being developed. State agency staff believe that they should be informed before significant institutional time and effort have been devoted to development of the program proposal. Once a program has been developed beyond the concept stage, the institution is likely to have faculty and courses already established; the state agency then has little leverage in making a decision. Several state agencies require that the institution submit a preliminary proposal describing a program it would like to offer before substantial planning takes place. New Mexico, California, Utah, and Idaho are among the states following this "early warning" procedure.

Although regional or professional accreditation is considered a voluntary process, most institutions agree that there are strong incentives to pursue it. While some aspects of accreditation are similar to program review, few institutions or states surveyed in this study reported that program review and accreditation were conducted concurrently. Cooperation between a few institutions and regional accrediting associations is a notable exception. Several universities and colleges in California and the University of Hawaii have recently begun to conduct program reviews as an integral part of their accreditation self-study. Arizona officials, in examining this relationship, found that cooperation between professional or specialized accrediting agencies and program review appears to be more feasible than coordination with regional agencies, whose interest is primarily with the quality of the total institution.

Not all institutional and state agency administrators agree that external agencies and institutions can or should coordinate program review activities; many believe the purposes are so different that separate reviews are necessary. While use of accreditation visiting teams are probably not possible in a statewide review of all programs offered in a discipline area, it appears from this study that some aspects of institutional self-study can be used for both program review and accreditation.

Outcomes of Program Review

The immediate outcomes of program review are directly related to the purposes for conducting the reviews; however, there may be unanticipated and longer term results as well. For example, as an institution states its programmatic goals and objectives in ways that permit evaluation and as it initiates a review process which measures achievement of those goals and objectives, it is automatically in a better position to adapt to external changes.

There may be other institutional benefits:

- assurance to student consumers that program quality has been evaluated;
- assurance to state government officials, legislators, and the general public that institutions and state higher education agencies are accountable;
- establishment of an ongoing program review and self-evaluation process at the institution;
- improvement in institutional and statewide planning;
- implementation of long-range plans;
- therapy of self-evaluation.

Program reviews may also have an impact on budget requests by identifying underfunded areas of the program being reviewed. These could include areas such as equipment, faculty salaries, instructional and support personnel, student aid, and general departmental support.

Educational opportunities available to citizens of a state may be enhanced through development of programs in a complementary rather than a competitive way when institutions are assigned exclusive roles. In addition, more immediate educational responses can be made to state manpower needs through cooperative institutional programs.

Undesirable outcomes of program review may come about because of political pressure. For example, influential politicians such as state legislators, and even board members, under pressure from institutions, occasionally subvert decisions to prevent the termination of particular programs. As a result of such actions, other underfunded programs suffer from limited funding. Although institutional staff have sometimes generated sufficient opposition to thwart implementation of program review decisions, officials must be convinced that public interest is being served through program review processes.

Maintenance of the vitality of postsecondary education is the most valuable outcome to be achieved through program review. This is possible

when programs which are no longer operating effectively are abandoned and programs which are vital and productive are strongly supported.

Following is a section which presents in brief outline form the alternative procedures and consequences involved in program review. This section is intended as a summary of results of the survey and as a quick guide to readers interested in comparing the possible approaches to program review.

ALTERNATIVES WITHIN PROGRAM REVIEW AND APPROVAL PROCEDURES

Sources of Authority

- -- constitutional
- -- statutory
- -- policy
- -- state agency agreement with institutions

Kinds of Authority

- -- recommendatory/advisory
- -- final decision making

Scope of Review

- -- programs (curricula leading to a degree or certificate)
  - existing and/or new
  - vocational and/or academic
  - all postsecondary, undergraduate, graduate and/or two-year or less
  - majors within programs
  - minors within programs
  - specializations or emphases within programs
  - courses
  - changes in degree requirements for already authorized programs

-- administrative units

-- research programs

-- public service programs

-- new cost units appearing in budget

Purpose of Review

	Existing	Proposed
-- to determine harmony with institutional role and mission	X	X
-- to determine harmony with institutional and/or state master plan	X	X
-- to avoid unnecessary duplication	X	X
-- to make judgments concerning allocation of resources	X	X
-- to evaluate a program's productivity	X	
-- to determine if established standards of quality are met	X	
-- to evaluate program's strengths and weaknesses	X	
-- to provide information necessary to improve needed programs	X	
-- to determine if resources are adequate for quality programs		X
-- to determine if needs justify the programs	X	X
-- to determine potential for accreditation		X

Description of Procedures

Review Process Participants

Institution

-- faculty in program

-- faculty outside program

-- students in program

-- students outside program

-- alumni from program

-- students who dropped out of program

-- department/division chairman

-- dean of college

-- academic program officer

-- institutional research director

-- trustees

System

-- staff

-- interinstitutional committee

State agency

-- staff

-- board members

Consultants

-- external to institution peers (program related)

-- external to institution peers (general)

Existing Programs

Criteria for Initial Selection of Programs for Review

-- minimum certificates/degrees awarded*

-- minimum enrollments*

-- few or no job opportunities for graduates

-- questions raised external to the institution

*See state summaries for detailed minimums.

-- duplication in state or region

-- general funding limitations

-- cost of specific program

-- accreditation review schedule

-- established cycle for recurring reviews

Criteria Used in Evaluating Programs

Need for program

-- student interest

-- demonstration of need generally

-- employment demand

-- duplication of program in state or region

-- contribution or importance in relation to other campus programs

-- value to society as a whole

-- inherent value

Cost and benefits

-- number of graduates in past

-- projected number of graduates

-- present enrollment

-- projected enrollment

-- cost

-- student credit hours generated

-- expected economies from consolidation or elimination

-- faculty workload and productivity

-- faculty quality

-- funding sources

-- physical resources

-- financial aid availability

Program objectives

-- harmony with role and mission statement and master plan

Accreditation

-- potential or achievement of meeting accreditation requirements

Program Decision Options

-- unconditional continuation

-- strengthen with additional resources

-- conditional continuation

-- consolidation of one or more programs

-- termination (immediate or phase out)

-- suspension

-- review not completed

Locus of Final Decision Making

State agency

-- staff

-- governing board or board committee

Institution

-- chief executive officer

-- academic program officer

-- department/division administrator

-- program review committee: graduate or undergraduate

-- governing board

Other

-- regional or national group

-- interinstitutional committee

-- state sector staff

-- governor or legislature

Internal (Institutional) Procedures for Program Approval and Review: A Summary of Survey Results

Institutional procedures for review of existing and proposed new programs are summarized in the following pages. This information was obtained by surveying each of the 494 western postsecondary institutions listed in the NCES Education Directory, 1977-78. Institutional respondents were asked if they had formal procedures for review of existing and proposed academic and/or vocational programs and if they had a priority setting process for allocation of funds to new or existing programs. In addition, they were asked to send printed materials or a written description of the procedures used. Table 1 summarizes the initial responses of the institutions.

Table 1

Summary of Postsecondary Institutional Responses by Level

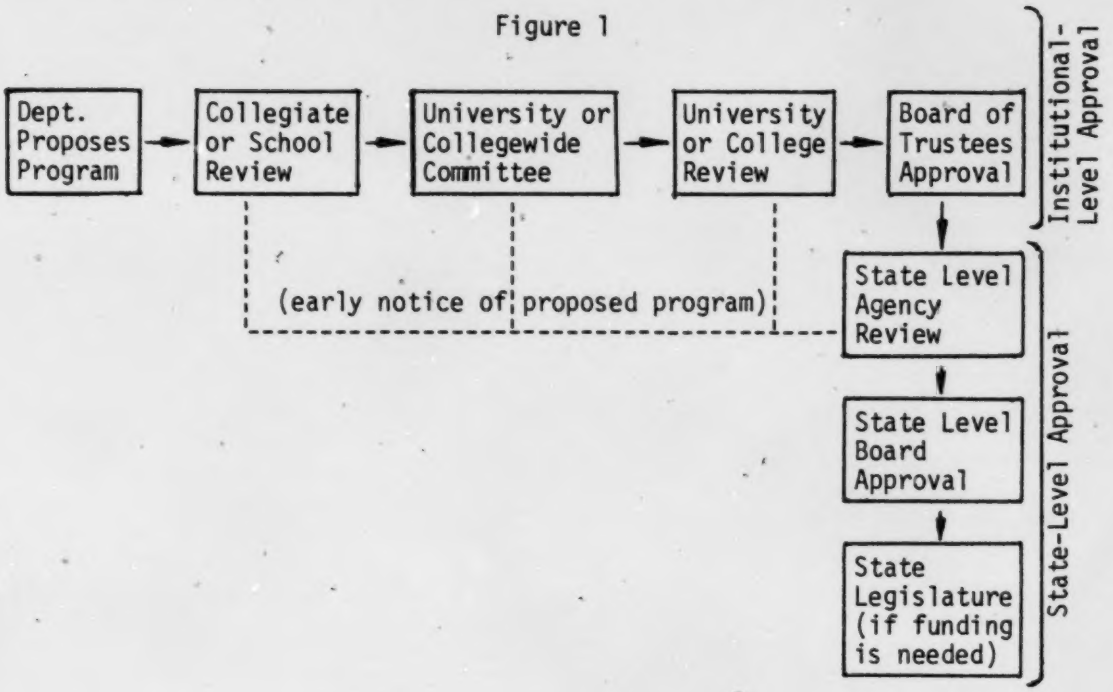
Level of Institution	Total Surveyed	Non Respondents	Formal Program Review Procedures		
			Yes	No	Developing
Graduate	181	60	85	29	7
Undergraduate	91	50	24	16	1
Two-Year	222	74	84	59	5
TOTAL	494	184	193	104	13

The 193 institutions which indicated that they had formal program review procedures were then sent a questionnaire asking for more detailed information about their procedures. Responses were verified by telephone interviews with designated contact persons at selected institutions.

Internal Program Approval

Program approval is the process whereby new program proposals are reviewed and decisions are made regarding the approval or nonapproval of program proposals. A "typical" process of program approval within colleges and universities is shown in Figure 1.

Figure 1



Typically, the process begins at the departmental level and if approved at that level progresses through the institution's faculty governance and administrative levels until it is either turned down or approved (sometimes the proposals are sent back for further development).

Our survey results indicate that campus administrators and faculty are the persons most frequently involved in the development of internal program approval and review procedures. Other participants involved in policy development are shown in Table 2.

Table 2

Involvement in Development of Current Procedures for Review in WICHE States

Total N = 105

	Faculty	Students	Alumni	Campus Admin.	Trustees	System Level Admin.	Support Staff	Staff Other Inst. in System	State H.E. Agency	Legislature
Number	66	36	9	74	27	32	23	14	26	6
Rank	(2)	(3)	(9)	(1)	(5)	(4)	(7)	(8)	(6)	(10)

Final disposition of program approval at the institutional level usually consists of approval by the campus administration followed by an action of the institution's lay board (especially if large sums of money are required to implement the program or if initiating the program will result in an expanded or different role and mission for the institution).

The process shown in the diagram in Figure 1 is a generalization based on the survey results, but the actual processes utilized may vary from this pattern. The process outlined is also more typical of four-year colleges and universities than of community colleges, Bible colleges, and private proprietary institutions. In this latter group of institutions, the degree of faculty involvement in program development and approval is typically less than in four-year colleges and universities.

Another variation in the approval process occurs in those institutions which are either a part of a college or university system or in a state in which the state postsecondary education commission approves new programs. In these instances, there may be external review procedures which either occur simultaneously or follow institutional approval procedures. For example, many state postsecondary agencies require that they be notified early in the program development process.

This approval may be a formal request to begin planning or merely a notification (oral or written) of the institution's program development activities.

The survey results indicate that most institutions approve programs through some kind of formal or informal process and only a very few have

no process at all. A follow-up survey to the latter group shows that a few handle program approvals in an ad hoc manner (i.e., only utilized when magnitude of the program requires it).

The purposes for conducting the program approval process in colleges and universities are shown in Table 3.

Table 3

Purpose for Review--Proposed Programs in WICHE Institutions

Total N = 105

	Consistency with Role and Mission	Consistency with Master Plan	Sufficient Resources	Justification of Program	Duplication of Other Programs	Accreditation Potential
Number	95	66	90	95	70	67
Rank	(1)	(5)	(2)	(1)	(3)	(4)

The most frequently cited purposes for conducting internal program approval are fairly consistent across most types of institutions and include (in rank order): (1) to determine if the documented needs justify the program; (2) to determine if the program is consistent with the institutional role and mission; and (3) to determine if there are sufficient resources. The criteria for review are almost always indicators based on these three purposes.

The most frequently noted criteria for program approval with respect to need were (in rank order of frequency): (1) justification of need; (2) student interest; (3) job opportunities; (4) duplication of other existing programs; (5) value to society; and (6) centrality to other programs on campus. The cost and benefit criteria in order of frequency of response were: (1) enrollment; (2) physical facilities; (3) sources of funding; (4) projected graduates; (5) faculty quality; and (6) faculty productivity. (See Table 4.)

Table 4

Criteria Used in Review of New Program Proposals

N = 105

A. Need for the Program

Student Interest	Justification of Need*	Job Opportunities	Duplication of Other Programs	Centrality to Other Campus Programs	Value to Society**
83	93	80	79	68	69

B. Costs and Benefits of the Program

Graduates in Past	Projected Graduates	Present Enrollment	Projected Enrollment*	Program Cost	Student Credit Hours	Economics from Elimination or Consolidation	Faculty Workload and Productivity	Faculty Quality	Sources of Funding	Physical Facilities Needed	Adequacy of Student Financial Aid**
16	68	27	80	60	55	28	56	61	70	78	39

C. Objectives of Program

Consistency with Role and Mission	Appropriateness to Revised Role and Mission
77	56

D. Accrediting Requirements

71

*Single most important criterion
**Single least important criterion

The responses from the WICHE states were generally consistent with the responses from the national survey.

The "key" individuals in the program approval process based on the survey responses are: (1) faculty associated with program; (2) outside peer consultants from the same academic discipline of the program under review; (3) the department chairperson; and (4) the academic dean, provost and/or vice president for academic affairs. The least frequently noted participants in the approval process were students not associated with the program and outside peer consultants with general backgrounds (not from the academic discipline under review).

In terms of the magnitude or importance of participation in the program approval process, the program's faculty (they developed the proposal), the faculty on internal review committees, and the institution's chief academic officer were the most important participants.

Where outside peer consultants are used, their judgment has considerable weight in the internal approval process, especially when they are perceived to be "objective." The survey results also showed that most of the institutions using outside peer consultants were at least somewhat satisfied with their use in program approval.

The cost of the internal approval process is borne by a combination of program funds (funds from the department proposing the program) or general institutional funds, with a large portion being in the form of contributed services of faculty and staff.

Internal institutional program review of existing programs is not new. Some institutions have been reviewing their programs (or a portion thereof) for a number of years. Approximately 12 percent of the WICHE institutions responding to the survey had policies and procedures for program review before 1965. (See Table 5.)

Table 5

WICHE States Date Present Policies and Procedures Were Initiated (%)

Before 1965	1965-69	1970-75	Since 1975
12%	12%	33%	43%

What is new and noteworthy is: (1) the increased number of institutions now conducting internal program reviews; (2) the increased comprehensiveness of the reviews; and (3) the increasing impact of program review on institutional planning and budgeting.

Approximately one-third of the colleges and universities surveyed have formal systems of internal program review for at least a portion of their instructional programs. Among institutional types, the larger four-year public colleges and universities indicate the most program review activity. Program review in the community colleges is largely restricted to vocational programs as a requirement for federal vocational education grants unless the community college is a part of a system or district or in a state where the state postsecondary agency requires or conducts program reviews. The least internal program review activity occurs in public and private four-year colleges and developing universities, Bible colleges, and proprietary institutions.

Most colleges and universities, both nationally and in the WICHE states, select programs for review on a rotating cycle. A large number of institutions, however, use a screening process (sometimes called "program audit") to select programs in need of a more in-depth review. Those institutions utilizing this type of screening procedure use program enrollments (usually over a five-year period), the availability of jobs for graduates, and the cost of the program as the primary criteria for identifying programs in need of a more extensive review. (See Table 6.)

Table 6

Criteria for Selection of Programs for Review

N = 105

	Enrollment	Number of Graduates	Jobs for Graduates	Cycle for Review	General Funding Limit	Cost of Program
Number of Responses	52	22	42	53	31	37
Rank	(2)	(6)	(3)	(1)	(5)	(4)

See state profiles for greater detail.

In the actual review of existing programs, the most frequently noted criteria utilized are shown in Table 7. With respect to the need for the program, student interest in the program, justification of need, job opportunities, and value to society were the most frequently noted (in rank order). In the area of cost and benefits of a program, enrollment, cost, faculty productivity, graduates, and faculty quality were frequently cited criteria.

Table 7

Criteria for Review of Existing Programs

N = 105

A. Need for the Program

	Student Interest	Justification of Need	Job Opportunities	Duplication of Other Programs	Centrality to Other Campus Programs	Value to Society
Number	79	77	69	61	61	62
Rank	(1)	(2)	(3)	(5)	(5)	(4)

B. Cost and Benefits of the Program

	Graduates in Past	Projected Graduates	Present Enrollment	Projected Enrollment	Program Cost	Student Credit Hours	Economics from Elimination or Consolidation	Faculty Workload and Productivity	Faculty Quality	Sources of Funding	Physical Facilities Needed	Adequacy of Student Financial Aid
Number	68	46	81	51	73	67	58	71	67	58	65	36
Rank	(4)	(10)	(1)	(9)	(2)	(6)	(8)	(3)	(5)	(8)	(7)	(11)

C. Criteria for Review of Existing Program

	Objectives of the Program Consistency with Role and Mission. Appropriate to Revised Role and Mission.	Accrediting Requirements	Other
Number	70	60	64
Rank	(1)	(3)	(2)

Most colleges and universities have responded affirmatively to the question of whether there is a relationship between program review and institutional planning and budgeting. Less frequently noted were relationships between institutional reviews and regional accreditation, professional accreditation, state agency program review and state master planning. (See Table 8.)

Table 8

Summary of the Relation of Program Review to Other Activities

Total N = 193

Level of Institution	Activity											
	State Master Planning		State Agency Program Review		Institutional Planning		Institutional Budgeting		Regional Accreditation		Professional Accreditation	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
2-year												
Public	26	8	34	5	37	1	36	2	32	2	28	4
Private	1	1	1	1	2		2		2		2	
4-year												
Public	3	2	3	2	4		4		3	1	3	1
Private		8		7	10		9		7	3	7	1
University												
Public	22	1	20	4	20		22		16	7	19	6
Private	1	14	2	12	17		15		16		13	4
Total												
Public	51	11	57	11	61	1	62	2	51	10	50	11
Private	2	23	3	20	29		26		25	3	22	5
Total	53	34	60	31	90	1	88	2	76	13	72	16

Final decisions (if any) on institutional program reviews generally rest with the chief campus academic officer or somewhat less frequently with the institutional program review committee.

State-level Review Procedures

State agency procedures for review of existing and proposed new programs are summarized in the following pages. This information was obtained from materials provided by the state agencies and through personal interviews on-site and at regional conferences with agency officials. The state procedure outline has been reviewed and approved by the agency administrator responsible for program review in each of the respective western states.

III. State Profiles

ALASKA

Authority

Alaska Postsecondary Commission

Statutory

-- Review of existing junior and senior level programs
-- Approval of proposed programs at junior and senior level

Action

-- Recommendations regarding new program approval to institutions and to Governor and legislature
-- Recommendations about continuance, discontinuance, consolidation of existing programs.

Scope of Program Review

-- At present, no review of programs which are not offered by a traditional institution of higher education, but plans for this type of review contemplated.
-- All 4-year and 2-year institutional program offerings in both the public and private sectors of both graduate and undergraduate levels.
-- Only degree-credit programs reviewed.

Purpose

-- To advise and assist University of Alaska and private institutions in identifying programs Commission sees as questionable, with recommendations for action.
-- To inform Governor and legislature of recommendations when no action taken or disagreement exists.
-- To encourage consolidation of weak programs, termination of inappropriate programs, and creation of needed new programs

Description of Procedures

Use of consultants:

Consultants not presently used.

Criteria for selection of programs to be reviewed:

-- Low graduate productivity
-- Low and/or declining enrollment
-- Comparatively (within the state) high cost
-- Low manpower needs
-- Duplication at one or more campuses within the state
-- Specialized programs not consistent with institutional roles, location, or capabilities

Time-line for review:

Not settled. Three-year review anticipated, possibly settling to a five-year when system matures further.

Relationship with external reviews:

Presently, all accreditation teams from the Northwest Accrediting Association which visit Alaska institutions include a member of the Postsecondary Commission as advisory member.

Funding for conducting program review:

Ongoing primary responsibility of Commission supported mainly by state general fund money, but also to some extent by Title XII money.

Data compilation for program review:

Each school provides Commission with the following data either through documents already submitted or by special request:

-- A list by name, degree, school, and major program of all graduates each year
-- An updated list of all offerings whether new, combined, or deleted
-- Degree program enrollments
-- Budget data to each department and/or program

Manpower projections are also obtained from the Alaska Department of Labor and the Institute for Social, Economic, and Governmental Research, University of Alaska.

Criteria used in evaluating programs:

-- Quality of faculty
-- Facilities allocated for use
-- Library support
-- Faculty workloads
-- Faculty-student ratio

Issues or Problems Encountered

-- Data not completely available from all schools
-- Defining quality
-- Not enough time, money, or staff to review highly questionable programs on-site
-- Disagreements between institutional personnel and system personnel as to what the "official" university data really is
-- Lack of a central system review on existing programs
-- Lack of university guidelines regarding presentation of new program requests

ARIZONA

Authority

Board of Regents

Constitutional

-- Review of existing programs at colleges and universities
-- Approval of proposed programs at colleges and universities

Action

-- Final decision

Arizona Board of Education and State Board for Community Colleges of Arizona

Policy

-- Review of vocational and community college programs

Action

-- Final decision

Scope of Review

Public 4-year college and university programs

-- All programs consisting of a series of courses and activities leading to a degree or certificate
-- Larger structural units such as College of Education

Community college and vocational programs

-- Review of all vocational programs annually

Purpose

Review is conducted to determine:

-- Duplication of programs
-- Quality (which may lead to identification of steps needed to bring a program up to a minimal quality)
-- Cost-effectiveness
-- Action needed to establish new programs, strengthen existing programs, continue programs at status quo, modify existing programs, or discontinue existing programs
-- Ways to improve both management and programs at institutional level

Description of Procedures

Approval of all new degree programs

-- Proposals developed by institutional faculty and administrators
-- Submitted to Board of Regents in required format which includes:

  -- Description of program
  -- Projected enrollment
  -- Faculty needs
  -- Library needs
  -- Facilities and equipment needs
  -- Administration needs
  -- Eligibility for accreditation
  -- Support program needs
  -- Costs
  -- Evaluation plans

Community college

-- New curriculum and vocational course approval must be obtained from the State Board for Community Colleges
-- All vocational programs undergo annual assessments by a visiting assessment team

Existing programs

-- State Board of Regents staff and Academic Officers Committee review data submitted by institutions

-- Criteria for selection of programs for systemwide review:

  -- Number of graduates from the program in each of the past five years as compared to national averages for comparable programs
  -- Number of students enrolled in the program in each of the past five years
  -- Size of classes and cost of courses including types of costs and sources of funding
  -- Cost per program including marginal costs
  -- Program quality as reflected by its regional or national reputation, faculty qualifications, and the level of the first position achieved by graduates of the program
  -- Faculty workload and productivity
  -- Total number of graduates in the program from all institutions in the state, region, and nation
  -- Economies and improvements in quality, if any, to be achieved by elimination and/or consolidation of the program
  -- Demand trends for the program and any other evidences of general student interest
  -- Appropriateness of the program to institutional role or mission
  -- Library and other support facilities available to the program
  -- Service and teaching load of faculty participating in the program
  -- Importance of program to other components of the university
  -- Local, regional, and national needs for graduates of the program
  -- Age and stage of development of the program

(In addition, all programs are to be reviewed internally on a ten-year cycle by each institution.)

-- Institutions conduct self-study of programs selected for review
-- Statewide review by external consultants who receive final appointment from Board of Regents from lists prepared jointly by institutions and state agency staff

  -- Over several weeks, the consultants visit each campus which offers the program under review, to meet with faculty, students, community members, and representatives of professional organizations

-- Criteria used for evaluation of program quality

  -- Resources available to program
  -- Outcomes in terms of need for, placement of, and adequacy of preparation of graduates in program
  -- Program costs
  -- Other relevant factors, e.g., unusual state needs

-- Institutions review consultants' reports before submission to Board of Regents
-- Consultant reports reviewed and decision made by Academic Affairs Committee and Long Range Planning Commission of the Board of Regents
-- Review procedure conducted in about three months with three cycles per year
-- Funds appropriated to the Board of Regents by the legislature cover review expenses for consultants

-- Possible decisions

  -- Strengthen
  -- Modify
  -- Continue intact
  -- Phase out/discontinue

CALIFORNIA

Authority

California Postsecondary Education Commission (CPEC)

Statutory

-- Review of proposed academic and occupational programs
   Action -- recommendation
-- Review of existing programs
   Action -- recommendation
-- Preparation and annual update of five-year master plan for California postsecondary education

Scope of Review

-- All vocational programs
-- All academic programs defined as a series of courses arranged in a scope and sequence leading to a degree or certificate

Purposes and descriptions of program review procedures will be discussed separately for each of the three segments and the Commission.

California Postsecondary Education Commission

Purpose

-- To insure articulation among segments
-- To prevent unnecessary duplication of programs
-- To coordinate and evaluate program review efforts among educational segments
-- To determine responsiveness to student and societal needs
-- To suggest procedures/guidelines for segmental reviews and to ascertain that such reviews are occurring

Description of the Procedure

-- Segments submit program review reports to CPEC

University of California System

Purpose

-- To preserve diversity within the system
-- To promote creative autonomy in planning academic programs
-- To insure that all academic activities are subject to similar standards of objective scrutiny
-- To maintain quality

Description of the Procedure

Approval of proposed new graduate programs

-- Proposed programs must be reviewed and approved by department faculty, dean, College Graduate Study Committee, Academic Vice President, and the Steering Committee of the Academic Planning and Program Review Board before being submitted to the System office

Review of existing programs

-- Standing sub-committees of the Graduate Council
-- Ad hoc faculty committees
-- External reviewers
-- Students

Criteria for selection of programs to be reviewed

-- Cyclical method for periodic review of all programs
-- Identification of "problem" units

Evaluation criteria

-- Research stature of faculty
-- Quality of students
-- Placement of graduates
-- Details of program

California State University and Colleges (CSUC)

Purpose

-- To insure effective and efficient utilization of available resources
-- To maintain quality of existing programs

Description of the procedure

Approval of proposed new programs

-- Proposal developed at campus level and submitted to the Division of Academic Program and Resource Planning in academic year preceding projected implementation

Evaluation criteria

-- Financial support
-- Qualified faculty
-- Physical facilities
-- Library holdings

Review of existing programs

-- Department and school conduct self-study
-- Program reviewed by University Graduate Council or Planning and Educational Policies Council
-- Distinguished colleagues from off-campus review program
-- Attempts made to coordinate reviews with professional and regional accreditation visits

Criteria for selection of programs to be reviewed

-- One-fifth of all programs reviewed each year

Evaluation criteria

-- Goals and emphases
-- Admission practices and student characteristics
-- Advisement procedures
-- Operation of the program
-- Quality and relevance

California Community Colleges

Purpose

-- To monitor educational programs and selected services in California community colleges
-- To determine the conformity of a program with district policy and plans and with the statewide master plan

Description of the procedure

Approval of proposed new programs

-- Extensive planning and study at the college and district levels precede submission to Chancellor's office
-- Consistency with college academic master plan which is reviewed by community advisory groups, faculty, curriculum committee, and administration, is determined
-- Approval by District Board of Trustees is required
-- Chancellor's office approval required
-- CPEC decides if it will approve Chancellor's recommendation

Evaluation criteria

-- Scope of instruction in accordance with legislation
-- Appropriate review has taken place
-- Four-year institution has agreed to accept transfer of students
-- Need for occupational programs justified by job market
-- Student interest in enrolling
-- Realistic plan for providing necessary resources for quality programs

Review of existing programs

-- Self-study by campus administrators, faculty, students, counselors, advisory committee members
-- Staff in Chancellor's office
-- Review team from other community colleges

Criteria for selection of programs to be reviewed

-- All vocational programs annually

Evaluation criteria

-- Same as criteria used for program approval

COLORADO

Authority

Colorado Commission for Higher Education (CCHE)

Statutory

-- Approval of new programs
Action -- final decision
-- Review of existing programs
Action -- recommendation

In 1978 General Assembly directed CCHE to review programs for preparation of nursing personnel and education personnel and to develop a state Master Plan for postsecondary education.

Scope of Review

Approval of new programs including "any new curriculum which would lead to a new degree program or the establishment of a college, school, division, institute or department."

Purpose

-- To promote realistic academic planning at institutions
-- To provide input to the determination of statewide priorities
-- To provide a framework for statewide academic program planning

Description of Procedures

New programs

-- Proposal developed and approved at institution
-- Submitted to CCHE where it goes to other institutions in the state with similar programs for review and comment and, if requested by any institution, to the Advisory Council on Higher Education Programs

Criteria

-- Relation to the long-range education plan for the state
-- Relation to the over-all academic mission of the institution involved
-- Impact of the program on other institutions, including private ones
-- Institutional capability to offer the program
-- Availability of the program to students who desire work in the field
-- Desirability of attracting students to a particular institution
-- Interest of the administration and staff in the establishment of such a program

CCHE also considers statewide goals

-- To maximize post-high school education opportunities for qualified youth of the state
-- To promote diversity in statewide higher education
-- To encourage high quality in all programs
-- To achieve full coordination of education program efforts among the institutions
-- To insure an orderly pattern of enrollment growth in public higher education
-- To effect the best utilization of available resources

Time-line

-- New program approval or disapproval voted by CCHE in January, May, and September usually within 90 days after proposal received.

Note: Bill of Particulars provided for all disapproved programs and will hold a hearing if requested.

Existing programs

Colorado Commission for Higher Education

-- Procedure currently being developed
-- Approved programs not offered for a period of two years and approved new new programs not implemented within one year are removed from future institutional and Commission publications and must go through the usual approval process before being offered

State Colleges and University Consortium procedures for program review

-- Goals

-- To improve the effectiveness of academic programs through self-study
-- To assure that academic programs are responsive to the broad educational needs of Colorado citizens
-- To avoid needless duplication of facilities and programs in higher education institutions in Colorado
-- To provide a sound base for long-range educational planning
-- To assure that essential educational services are being effectively provided through the best utilization of available resources

-- Use of external consultants optional
-- Self-study by institution uses broad-based institutional committee evaluation submitted to President and Vice President for Academic Affairs
-- Systemwide task force conducts systemwide reviews and comparisons to evaluate effectiveness of comparable programs of Consortium institutions
-- Task force recommendations to Consortium cabinet

State Board for Community Colleges and Occupational Education

-- Approves or disapproves all vocational program proposals

Outcomes

Nursing -- specific recommendations by CCHE to increase access, to balance supply to manpower needs, to seek and maintain accreditation, and to efficiently use state resources

Teacher Education -- specific recommendations by CCHE to improve these programs in Colorado

HAWAII

Authority

Board of Regents (constitutional)

Statutory

-- Review of all existing programs
-- Approval of all new programs

Action -- final decision

Scope of Program Review

-- University of Hawaii at Manoa Academic Senate in the early 1970's established policy and procedures requiring review of each academic program
-- Review and evaluation of each established instructional, research, and public service program every fifth year - Board of Regents policy (1973). New programs authorized as provisional to be evaluated when the first students graduate - no tenure decisions or commitments during the provisional status.
-- Definition of program -- (not clearly stated or applied) some campuses - organizational units; others - degree majors. Process does not look at overall state picture, only individual programs.

Purpose

Mixture of purposes and objectives.

-- (Manoa) Maintain and protect program quality for programs that were to be kept and discontinue programs which should not be kept - primarily diagnostic link with WASC self-study for accreditation carried out with program review.
-- (Board of regents) Identify programs that are weak or high cost and low priority which should be discontinued

Description of Procedures

-- Campus - academic senate; program faculty, students, and department chairman; Graduate Council, if applicable; Associate Dean and Dean; Chancellor
-- State-Level - system staff, Board of Regents
-- Consultants - Visiting accreditation team used as consultants at Manoa. Consultants make recommendations based on quantitative review.

Criteria

-- Program objectives
-- Priorities
-- Target groups
-- Costs
-- Funding
-- Facilities
-- Faculty
-- Measures of effectiveness
-- Continuing need/demand
-- Responsibility for developing the schedule and for submitting an updated version annually to the Office of the President delegated to each campus

Time-line

-- Updated version of review submitted to Board of Regents and Office of the President annually
-- Process of reviewing one program allotted one year to complete

Relationship with External Review

-- Manoa linked with WASC through concurrent accreditation and self-study review of programs
-- Annual visiting committees from WASC focus on programs reviewed for year of the visit

Funding

-- Very costly in terms of psychological and physical energy due to uncertainty, and in fiscal costs, coordinating duties, report processing, and undue program attention and focus (versus campus-wide focus) by visitation committees

Data Compilation

-- Absence of operational criteria to be applied in program review

Decisions

-- Continue/discontinue programs on program-by-program basis

Problems

-- Extended and complicated process making reviews as much as five years old when President's office receives them
-- Mixture of purposes and objectives reduced value to institution
-- Behavioral response not calculated carefully enough for steps to increase probability of positive implementation - faculty feel it is simply another ritual imposed on them to serve bureaucracy
-- Lack of plan and priorities results in piecemeal approach without looking at the entire campus
-- Absence of operational criteria at policy level
-- Absence of review policies for administrative and support functions so review of programs implies threat of discontinuance
-- Program review of one-fifth of programs each year obscures priorities and reallocations
-- Program review of one-fifth of programs leaves constant state of uncertainty
-- Accreditation processes and annual review link have reduced effectiveness of both
-- Classes of action resulting from program review should be clearly known by all participants
-- Program review based on unit and sub-unit evaluations gives no opportunity to look at curricular needs and programs across the system. Two kinds really needed:

    1. Departmental internal program review
    2. Quantitative review by outside consultants

-- University now involved in multicentered review and analysis of past five years to modify current approach

IDAHO

Authority

State Board of Education

Statutory

-- Approval of proposed four-year college and university programs

Action -- final decision

-- Review of existing four-year college and university programs

Action -- final decision

Policy

-- Approval of proposed community college programs

Action -- recommendations

-- Review of existing community college programs

Action -- recommendations

Scope of Review

-- New or expanded programs leading to a new degree, certificate, major, or field of specialization within a major
-- New schools, colleges, institutes, or foundations
-- Existing program areas which result in a degree or certificate awarded by the institution
-- All graduate programs

Purpose

-- To improve the quality of higher education through curriculum coordination, planning, and evaluation

Description of the Procedure

Approval of new programs

-- New program proposal developed by faculty and department administrators within institution and submitted to institutional curriculum committee
-- Notice of intent sent at same time to State Curriculum Committee (Institutional Vice Presidents) through Deputy Director of Curriculum Planning
-- Curriculum Committee members report reactions from their respective campuses to the Deputy Director
-- Institutional representative explains proposed program to Curriculum Committee
-- Committee approved proposals added to Deputy Director's cumulative list submitted to Board of Education at June meeting with his recommendations for action
-- Institutions submit funding requests for approved programs at July Board meeting
-- Programs for which Board grants permission to seek funding are assigned priority in the higher education budget requests to the next legislature
-- Projected program proposals may be rewritten and resubmitted to Curriculum Committee. After two rejections, State Board approval may be sought independent of Curriculum Committee approval
-- Vocational program proposals follow same procedure with the State Director for Vocational Education presenting the proposal
-- Community colleges voluntarily submit proposals for new programs to the Curriculum Committee
-- Private institutions invited to participate in approval procedure via their academic vice presidents

Review of all existing postsecondary programs

-- Deputy Director examines annual productivity data and reports programs not meeting minimum standards to Board of Education
-- Board selects three or four program areas for review during the next year
-- Institutional staff conducts self-study

-- Consultants selected jointly by Deputy Director and institutional staff spend full week visiting institutions to meet with self-study author, faculty, students, and administrators; holding hearings at which all interested persons make presentations
-- Consultant reports incorporated by Deputy Director into official report for State Board review

Criteria for selection of graduate programs for review (no review of any graduate programs triggered to date)

-- Minimum number of degrees awarded

Master's degree programs -- 5 graduates per year average for 3 years
Doctor's degree programs -- 3 graduates per year average for 5 years
Professional certificate and specialist programs -- 5 graduates per year average for 3 years

-- Programs which have had complaints or problems
-- Board identification of 3-4 program areas for review each year

Evaluation criteria

-- Objectives of the program--recent changes, anticipated changes
-- Accomplishments
-- Plans for the next five years
-- Job placement for previous three years
-- Job market supply and demand
-- Relationship with institutional role and mission
-- Similar programs in the state and in the region
-- Interest by outside groups
-- Enrollment statistics--past and projected, capacity
-- Degrees granted in prior ten years
-- Personnel--faculty and staff
competencies--existing, lacking
-- Curriculum
present courses, courses to be added, strength, unique features
deficiencies, remedies, interrelation with other curricula
anticipated changes
-- Informational resources/library/facilities/equipment
present, needed
-- Finance
total cost, source
-- Accreditation
-- Continuing education
-- Priorities

Outcomes

Outcomes of statewide program reviews

1974	Department of Architecture	abolished
	Parks and Recreation	
	Business	
	Continuing Education	
	Journalism	-- new focus of journalism program offered by Boise State - a communications major -- one state publication for all three universities
1978	Nursing	-- recommended changes at associate level at Lewis-Clark State College and delayed implementation of baccalaureate degree program
	Education	
1979	Engineering	-- authorized Energy Experiment Station at Idaho State University

MONTANA

Authority

Board of Regents for Higher Education

Constitutional and statutory

-- Approval of new programs
-- Review of existing programs

Action

-- Final decision

Scope of Review

-- All proposed new schools or colleges
-- All series of courses arranged in a scope or sequence leading to a certificate or a degree which has not been offered in the institution or appeared in the catalog in the previous two years

Purpose

-- Better utilization of resources
-- Improvement of quality

Description of Procedures

New programs (includes vocational programs)

-- Proposals developed and approved at institution
-- Proposals submitted to the Commissioner of Higher Education
-- Commissioner's staff reviews proposal and makes recommendations to the Curriculum Committee of the Board of Regents
-- Board may require use of external consultants

Criteria

-- Quality
-- Objectives
-- Resources available (faculty, facilities, equipment, library holdings)
-- Costs
-- Projected enrollments
-- Job opportunities for graduates
-- Duplication

Existing programs

-- Each institution is to review its programs on a regular basis
-- Regional and professional accreditation provides review of some programs
-- Selected lateral (inter-institutional) reviews conducted

Outcomes

-- No reviews conducted since 1975-76, pending completion of Role and Scope statement for the University System

NEVADA

Authority

University of Nevada System Board of Regents (constitutional)

Statutory

-- Approval of new program proposals for vocational-technical, and public senior and junior institutions
  Action -- final decision
-- Review of existing programs
  Action -- final decision

Scope of Review

-- Instructional, public service, and research programs at public junior and senior institutions
-- Series of courses which lead to a degree or certificate not previously awarded
-- New major or emphasis with an existing program
-- New departments or divisions, schools or colleges, laboratories, centers, or similar administrative units

Purpose

-- To work toward the improvement of the quality of the services required to meet the goals identified in the four-year plan

Description of the Procedure

Approval of new programs

-- Basic information developed by institution and submitted to Board of Regents
-- Board decides if additional work should be done
-- Detailed information presented and Board rejects or approves proposed program subject to legislative funding
-- Institution has option to select and use consultants at institutional expense

Criteria for evaluation

-- Program description and objectives
-- Relationship of objectives to other segments of the institution
-- Need for program, local, state, regional, and national intrinsic academic value, employment opportunities
-- Resources
-- Entrance and graduation requirements
-- Course content--changes needed
-- Accreditation requirements

Outcomes

-- 45 proposed programs were considered by the Board of Regents between 1969-1977; 16 have been funded and implemented

Problems

-- Consultants to institutions may be advocates for program rather than unbiased evaluators
-- Inadequate definition may invite political intervention
-- Greater state agency involvement would permit programmatic review across institutions

NEW MEXICO

Authority

Board of Educational Finance (BEF)

Statutory

-- Approval of new program proposals
-- Review of existing programs

Action

-- Final decision

Scope of Review

-- All postsecondary programs defined as a series of courses leading to a degree which identifies graduates (does not include options within programs) at all vocational-technical, public junior, and senior institutions
-- All new, different, renamed, or reorganized graduate majors that require additional staff or other resources submitted to the BEF. Staff determine if BEF approval is needed.
-- BEF maintains an "Inventory of Majors"

Purpose

-- To insure more thoughtful planning and more rational setting of institutional priorities
-- To enhance interinstitutional cooperation

Description of the Procedure

Approval of new graduate programs (Ed.D. and Ph.D. programs must be received two years before implementation; master's programs, one year before implementation)

-- Proposals developed and approved at institution
-- Submitted in early concept form to BEF for approval to proceed with development and again as fully developed proposal

Criteria for evaluation

Institution provides:

-- Description of the proposed program
-- Relation to existing programs
-- Additional courses required
-- Evidence of need
-- Types of employment for which graduates are qualified
-- Costs

State Board provides:

-- Report of similar programs offered in the state
-- Number of degrees granted in the program in New Mexico for past 8 years
-- New Mexico's relation to the national picture in production of degrees
-- Student load in comparison to that at other state institutions
-- Credit hours per instructor
-- Average class size by level

Existing programs

Procedure followed 1975-77:

-- Procedure designed by BEF and statewide Academic Council for Higher Education composed of the chief academic officers of the six public institutions of higher learning
-- Fact sheet for every program developed by staff at each institution
-- Academic Council developed criteria for selection of programs that should undergo extensive review
-- BEF staff developed an inventory of degree programs
-- Academic Council visited each institution and met with faculty and staff concerning programs which did not meet the criteria for selection
-- Institutions produce accurate data on program enrollment, graduates, and costs on ongoing basis

Criteria for selection of programs to be reviewed

(Criteria are reviewed and established by staff and council for each cycle)

Complete review of all programs every five years

Graduates

-- Number of graduates by degree level from each program in the last five years
-- Baccalaureate level programs having four or less graduates per year on the average over the last five years
-- Master's level programs having three or less graduates per year on the average over the last five years
-- Specialist level programs having three or less graduates per per year on the average over the last five years
-- Doctoral level programs having two or less graduates per year on the average over the last five years

Enrollment

-- Average of head count students enrolled in Fall 1974 and Fall 1975
-- Baccalaureate level programs having twelve or less majors per year on the average over the last two reporting periods
-- Master's level programs having nine or less majors per year on the average over the last two reporting periods
-- Specialist level programs having nine or less majors per year on the average over the last two reporting periods
-- Doctoral level programs having six or less majors per year on the average over the last two reporting periods

Time-line

-- Complete process takes two years

Source of funding

-- No special funds appropriated; part of regular operation of institution

Criteria for evaluation

-- Developed by the Council for each cycle

Outcomes

-- 141 programs failed to meet criteria
-- Intensive review resulted in: 71 dropped or combined
21 continued
27 required continuing review

OREGON

Authority

Oregon Educational Coordinating Commission (OECC)

Statutory

-- Review of new vocational program proposals
-- Review of all proposed new postsecondary programs
-- Review of existing programs

Action -- final decisions limited to cases referred by state boards

State Board of Higher Education (SBHE)

Statutory

-- Approval of new program proposals
-- Review of existing programs

Action -- final decision except where there is adverse intersegmental impact

State Board of Education -- Community College Division

Statutory

-- Approval of proposed new vocational programs

Action -- final decision except where there is adverse intersegmental impact

Scope of Review

-- New majors, degrees, and certificate programs
-- New areas of specialization or options for existing programs
-- Changes in degree requirements for already authorized programs
-- Program defined as "collection of activities and resources contributing to the education of a group of students pursuing a common curricular path"

Oregon Educational Coordinating Commission

Purpose

-- To determine if the proposed program or change will have an adverse intersegmental impact
-- To determine consistency with statewide goals and objectives

Description of the Procedure

Review of proposed new programs

-- Program proposals approved by the Department of Education, Community College Division, and proposals approved by the State Board of Higher Education submitted with supporting documentation for review by the Coordinating Commission

Evaluation criteria

-- Consistency with statewide plan
-- Intersegmental coordination

Review of existing programs

-- Segmental boards submit program review reports to OECC

State Board of Higher Education

Purpose

-- To avoid unnecessary and unwise duplication of programs in Oregon colleges and universities (program approval)

-- To assure that programs are consonant with the needs of the state and consistent with the goals and objectives of the institution (program approval)
-- To determine the strengths and weaknesses as well as the benefits and effectiveness of institutional programs (program review)
-- To stimulate and encourage improvement in quality of programs (program review)

Description of the Procedure

Approval of new program proposals

-- Proposal developed and approved by institution involving faculty, students, administrators, advisory boards, interested groups and the public
-- Proposals and supporting documentation forwarded to the office of the State Board of Higher Education where the concern is segmental planning and segmental management of governance.
-- Board's office analysis and recommendation are forwarded with the proposal to the State Board of Higher Education for consideration and action
-- If the proposal is approved by the State Board of Higher Education, copies of the material considered and the action are forwarded to the Oregon Educational Commission where statewide planning and intersegmental coordination is emphasized
-- Board or Commission may involve consultants in procedure

Evaluation criteria

-- Community and societal need (including employment needs, where relevant)
-- Resources to offer program
-- Relationship to other programs in the institution
-- Duplication and impact on other institutions and segments
-- Fiscal impact and priorities

Review of existing programs

-- Conducted and facilitated by the staff of the Board's Office of Academic Affairs
-- Recommendations prepared by the Office of Academic Affairs and the Chancellor for Board consideration and action
-- Information about programs under review provided by appropriate departments and and university officials
-- Students' perceptions solicited through questionnaire surveys
-- Outside consultants and evaluators used to assess the quality of programs under review and the general "climate" for learning and research within the department

Criteria for selection of programs to be reviewed

-- Low degree conferral
-- Programs offered by more than one institution

Evaluation criteria

-- Description of program and statement of program objectives
-- Enrollments and student credit hour production
-- Student profile
-- Resources utilized in offering program
-- Faculty profile
-- Time required for completion of the degree
-- Student attitudes toward program
-- Program outcomes such as job placement of graduates
-- Cost-benefits interaction
-- Quality
-- Relationship to other institutional programs, and to the community and larger area to be served
-- Prospects for the future of the program
-- Effects of discontinuing the program

Possible decisions

-- Continue
-- Continue on a conditional basis
-- Consolidate with one or more other programs
-- Suspend or terminate

Outcomes

1976--Reviewed 37 low-degree-conferral graduate programs

14 continued
3 continued on a conditional basis
5 consolidated
4 suspended or terminated

1977-78

Physics, chemistry, biology master's and doctoral level; continuation for all programs authorized with areas in need of improvement identified
Business administration; continuation for all programs

1978-79 (in process)

Political science, sociology, economics, geography and urban studies
Education

1979-80 (plans)

Mathematics, geology, computer science, statistics, systems science

1977-79--Development of comprehensive report on Graduate Education in Oregon--A Response to a 1977 Legislative Budget Note; better understanding on the part of legislators and the public of the nature and importance of graduate education in Oregon

State Board of Education -- Community College Division

Purpose

-- To determine the need for a program
-- To analyze such factors as duplication, program impact, fiscal impact, program congruence with state goals
-- To determine adverse impact on other segments of education

Description of the Procedure

Approval of proposed new programs

-- Proposals developed and approved at institution involving faculty, administrators, advisory committees, and interested groups
-- Proposals and supporting documentation forwarded to segmental representative for use in informing all other community colleges
-- If application data appears relatively complete, a copy is sent to the staff of OECC for informal communication about proposed programs
-- Manpower analyst in Community College Division reviews and analyzes manpower data
-- Division program specialist analyzes application in detail and recommends approval or disapproval
-- State Board acts on proposal
-- Approved proposals with supporting documentation submitted to OECC
-- Division approval of curriculum provides authority to implement the program

Evaluation criteria

-- Financial impact
-- Consistency with established guidelines
-- Description and objectives
-- Occupational demand
-- Intersegmental impact
-- Duplication of programs

Review of existing programs

-- Local community colleges have adopted procedures and criteria
-- Federal regulations require evaluation of existing vocational programs every five years

Evaluation criteria

-- (Final criteria currently being developed by Department of Education)
-- Financial
-- Agreement with established guidelines
-- Assurance that program remains current
-- Consistency of hours and courses with approval documents
-- Identification of situations which require special contracts or arrangements
-- Lack of sex discrimination
-- Reflection of federal requirements
-- Consistency with statewide objectives and institutional role

UTAH

Authority

Board of Regents

Statutory

-- Approval of new programs
-- Review of existing programs

Action -- final decision

Scope of Review

-- Whenever a new cost unit is to be added, the Board reviews it
-- All postsecondary programs--series of courses which lead to a degree, diploma, or certificate
-- New schools, colleges, institutes, foundations, and administrative units

Purpose

-- To eliminate unnecessary spending caused by program duplication
-- To assure that available resources are adequate to produce quality education
-- To isolate programs not meeting selected minimum criteria and to determine if the services they provide are sufficient to merit attention

Description of the Procedure

Approval of new programs

-- Development of concept for proposed program submitted to Board of Regents' office
-- Review of institutional proposal by other institutions in Utah System of Higher Education
-- Board staff assesses proposal in relation to institution's role and in terms of statewide planning and invites institution to submit complete proposal depending on the assessment
-- Panel of outside consultants thoroughly reviews all new advanced professional and doctoral degree program proposals

Criteria

-- Need (manpower requirements, projected enrollments)
-- State's ability to finance
-- Costs
-- Proposed curriculum
-- Needed facilities and equipment
-- Consistency of program with the institution's role

Time-line

-- Request to approval is about three months

Existing programs

-- Board of Regents staff use established criteria to identify programs for review
-- Self-study of identified programs conducted by institutional staff
-- Board of Regents make final decision about program status

Criteria for selection of programs to be reviewed

-- Examine programs in areas identified by Regents, or in Master Planning efforts
-- Examine all degree programs every third year for productivity according to HEGIS report information
-- Identify for indepth review programs that do not produce a three-year average, by degree level as follows:

Educational Degree Level	Number of Graduates Per Year (Three-Year Average)
1. Doctoral Programs	2
2. Master's Programs	5 (if doctorate offered) 3 (if no doctorate offered)
3. Bachelor's Programs	8 (if master's/doctorate offered) 5 (if no graduate work offered)
4. Associate Programs	7
5. Certificates	10

Criteria for evaluation of programs

-- Numbers of program graduates and enrollees in each of the last 3 years
-- Program class sizes for the preceding year
-- Program cost per SCH during the past 3 years
-- Faculty workload data
-- Evidence of program quality
-- State and national production data in the program discipline
-- Dollars saved and quality improvements to be achieved through program consolidation or elimination
-- Student interest, manpower demand, and placement
-- Increased dollars necessary to establish a viable program
-- Other selected information

Possible Regents' decisions

-- Continuation without prejudice
-- Probation
-- Termination of programs

Outcomes

DEGREES, PROGRAMS, AND ADMINISTRATIVE UNITS DISCONTINUED

Institution	Total 1969-1975	Total 1975-1979	Total 1969-1979
University of Utah	71	10	81
Utah State University	37	4	41
Weber State College	21	1	22
Southern Utah State College	6	2	8
Snow College	3	5	8
Dixie College	6	10	16
College of Eastern Utah	-	15	15
Utah Technical College-Salt Lake	2	2	9
Utah Technical College-Provo	7	1	3
Totals	153	50	203

Count on Programs Denied/Disapproved 1969-1979

Total number proposed programs disapproved by the Utah State Board of Regents during the period 1969-70 through 1978-79 equals 71.

WASHINGTON

Authority

Council for Postsecondary Education (CPE)

Statutory

-- Review and recommendation of new programs

-- Review of existing programs

Action -- recommendations to institutional governing boards, governor, and legislature

State Board for Community College Education

Statutory

-- Approval of new vocational programs
-- Review of existing programs

Action -- final decision

Scope of Review

-- All curricula which lead to a vocational degree or certificate (State Board for Community College Education)
-- Review and recommendation of new program proposals
-- Review of existing programs has concentrated at the graduate level
-- Program is a set of courses and related activities leading to a degree, and includes new degrees constituted entirely of existing elements

Purpose

-- To maintain articulation and coordination among the parts of a complex system of postsecondary education
-- To facilitate planning for postsecondary education in the state

Description of the Procedure

Approval of new program proposals

-- Proposal developed at the institution submitted to CPE preceded by a preliminary planning statement at least six months earlier
-- Council staff review proposal and verify data
-- Institutional staff react to Council recommendations

Criteria for evaluation of proposal

-- Description of program

-- Objectives
-- Content

-- Evidence of program need

Student:

-- Student inquiries and applications
-- Alternative programs at the institution
-- Career orientation

Institutional:

-- Interrelated programs at the institution
-- Faculty development
-- Institutional priority of program area

Societal:

-- Career market analysis
-- Social problem solving potential
-- Similar programs in the state and region
-- External agency support (state, regional, and national)

-- Program quality

-- Curriculum (national standards)
-- Faculty (existing and new)
-- Accreditation (program and related programs)
-- Placement of graduates from related programs

-- Institutional fit

-- Institutional role and mission
-- Fit with other institutional programs and functions

-- Fiscal impact

-- Staffing (faculty, administrators, etc.)
-- Facilities
-- Support (libraries, computer, etc.)

Decisions must be made at all points (both internal and external) on the relative merits of a proposal and the balance of quality, need, cost, and institutional fit. The relative weighting of the elements will depend upon the nature of the proposed program.

Existing programs

-- Postsecondary Education Council staff
-- Institutional administrators and faculty
-- Institutional governing boards

Criteria for selection of graduate programs to be reviewed

-- Chronic low productivity
-- Duplicated programs

Criteria for evaluation of graduate programs

-- Program need (student, institutional/faculty, societal)
-- Program costs, resources, productivity
-- Harmony with institutional role

Possible decisions

-- Program continuation
-- Contingent continuation
-- Conditional continuation
-- Consolidation
-- Termination
-- Review not complete
-- Other

Outcomes

500 programs reviewed
88 programs phased out
118 programs to receive further review

WYOMING

Authority

(Higher Education Council abolished by legislature in 1978)

University of Wyoming reviews its programs

Wyoming Community College Commission

Statutory

-- Approval of new programs
-- Review of existing programs

Action -- final decision

Scope of review

-- All vocational programs
-- All curricula which lead to a certificate or degree
-- University of Wyoming internal approval of all new program proposals

Description of the Procedure

Approval of new programs

-- Four-year and graduate programs developed and approved at University of Wyoming by Graduate Committee; Graduate Advisory Committee; Academic Planning Committee, Office of Academic Affairs, and Board of Trustees
-- Two-year college and vocational programs developed and approved by campus staff
-- Two-year college and vocational program proposals submitted to Community College Commission

Criteria

-- Costs
-- Objectives
-- Relation to institution role
-- Manpower needs in state
-- Student interest
-- Differences from other programs in Wyoming

Existing programs

-- Only procedure for university programs is self-study for external accreditation

Criteria for evaluation of community college programs

Self-analysis of occupational programs includes review of:

-- Objectives and status in achieving them
-- Strengths and weaknesses
-- Need for program
-- Student interest (enrollment)
-- Costs
-- Short- and long-range plans for the program
-- Community and college interchange of resources, talents, and opportunities
-- Names of program completers and location of job, if attained

Funding source

-- State funding

Outcomes

Outcomes are reflected in accreditation of the institution and of specific professional programs.

Community College Commission

-- No outcomes published as a result of formal systemwide review

WICHE

Improving Education In The West

WICHE, the Western Interstate Commission for Higher Education, is a public regional organization. It helps the thirteen member states cooperatively provide high-quality, cost-effective programs to meet the education and manpower needs of the West. WICHE's Project on Expanding Regional Cooperation in Graduate and Professional Education encourages resource sharing in graduate and professional education in the West by providing information about these programs throughout the region. It is supported by a two-year grant from the Carnegie Corporation of New York and by WICHE state dues through its Student Exchange Program.

NCHEMS, the National Center for Higher Education Management Systems, is an independent, nonprofit organization working nationally to improve planning and management in postsecondary education. The NCHEMS four-year project on state-level information was undertaken in 1975 with funding from the W.K. Kellogg Foundation and supplemental support from the National Center for Education Statistics to assist state-level planners for postsecondary education in addressing their information needs. Project results have been gathered in documents providing a reference framework and planning guidance to help state agencies develop an information-system planning approach tailored to individual state responsibilities and needs.